Construction News

★Denotes work advertised in ENGINEERING NEWS.
✚Denotes contract awarded. The names of bidders awarded contracts are set in CAPITALS.

CHAOTIC TRADE CONDITIONS

The machinery built up through more than a hundred years practice to conduct the foreign trade of the United States has broken down, and conditions are now so unusual that trade abroad is practically impossible, at this writing, even if there were vessels to convey the merchandise. All this occurs through the breaking down of foreign exchange, and for the time being, any trading which is carried on will have to be done more or less by barter.

Such a catastrophe as a general foreign war, involving all of Europe, was scarcely dreamed of. To be plunged into it in less than a week and then have European investors unload securities acquired here for a couple of generations, would have caused immeasurable suffering in this country and the wiping out of competence and fortunes. For this reason, the closing of the principal exchanges in the United States, the resort to clearing house certificates and emergency currency was the measure of protection, not because of alarming conditions in the United States, but to prevent the general European panic from spreading here. Business activity in the United States will resume its normal status, after the lapse of a few months, but in a more restricted way, particularly if the European nations continue their conflict for any great length of time thus requiring the issue of an enormous bulk of new securities. This will raise the interest rate of the world and will make it difficult for municipalities and geographical divisions to secure money at the old rate of interest.

The Comptroller of the City of New York has announced that subway work now under construction would go forward and that the remaining contracts would be let, permitting the rounding out of the system. This is as it should be. Some other work will be postponed, such as the $12,000,000 circular court house which will be a structure of beauty. It is likely that the lavish expenditures by American railways for elaborate passenger terminals will be checked for many years, but ordinary construction will go on with very little hindrance.

The fact that the American farmers are harvesting a great crop, which they will eventually sell to the people of Europe at a higher price than in time or peace, will mean much for the agricultural and financial prosperity of the country. The crop report of Aug. 1, however, was much less satisfactory than was expected.

Prices of materials are difficult to quote. There is always hand-to-mouth buying by some consumers who must have supplies. The U. S. Steel Corporation announced on Aug. 5 that all quotations had been withdrawn on Aug. 4. This means that there is no standard price for steel products. One reason why the steel trade is unable to take contracts for forward delivery is the shortage of ferro-manganese. This material, which comes from Russian ore, for the most part, is practically indispensable in the present process of steel manufacture. Some manganese ore comes from South America, but for the present there is no way of knowing when it will be possible to secure supplies.

A spectacular advance in pig tin doubled the price in less than a week, leather is scarcely quoted, while the rubber market is demoralized. Within a month trade conditions as far as the U. S. is concerned, should settle down and become more or less normal.

Comparative Prices—The wild movement in the price of commodities is shown in the accompanying table. Some of the quotations given are of course only of academic interest to readers of the paper but they serve to show the startling changes in a few weeks .

Wholesale Prices	July 1	Aug. 10
Pig Tin per lb.	$0.31	$0.64
Solder per lb.	0.20	0.38
Antimony per lb.	0.07½	0.16
Rubber (up river) Para fine per lb.	0.60	1.20
Quicksilver per flask	35.00	85.00
Sugar 100 lb.	4.40	6.00
Flour per bbl	4.50	5.85
Corn bu. (Chicago)	0.55	0.72
Wheat bu. (Chicago)	0.77	0.98

LABOR

Most of the Labor Bureaus in New York are of the opinion that there will be no shortage of contract laborers. The general opinion is that there will be a surplus of laborers, particularly of this class, in the very near future. The mobilization of Austrians, Germans, and men of the Balkan provinces in this country, has practically ceased, owing to the inability to secure transportation; and most of these will be looking for work. There has also been a great rush of foreigners to get naturalization papers. Most of the construction work has been carried on by immigrants from the south of Italy, and the Italian immigration has made up nearly 25 per cent. of the total immigration coming into this country. In the accompanying table, taken from the immigration report for May, 1913, the United States Department of Labor, is shown the total permanent immigration. The temporary, or non-immigrant arrivals being given in a different part of the report and not published. Unofficial figures for May and June are also available, the total immigration for May numbering 107,796, while for June the number was 71,728, Italian immigration, alone, falling off about 14,000.

IMMIGRATION, FROM U. S. DEPARTMENT OF LABOR BULLETIN

Races	Years ended June 30— 1904	1905	1906	1907	1908	1909	1910	1911	1912	1913	July, 1913, to May, 1914
African (black)	2,386	3,598	3,786	5,235	4,626	4,307	4,966	6,721	6,759	6,634	7,387
Armenian	1,745	1,878	1,895	2,644	3,299	3,108	5,508	3,092	5,222	9,353	7,555
Bohemian and Moravian	11,911	11,757	12,958	13,554	10,164	6,850	8,462	9,223	8,439	11,091	9,338
Bulgarian, Servian, Montenegrin	4,577	5,823	11,548	27,174	18,246	6,214	15,130	10,222	10,657	9,087	14,286
Chinese	4,327	1,971	1,485	770	1,263	1,841	1,770	1,307	1,608	2,022	2,169
Crotian and Slovenian	21,242	35,104	44,272	47,272	47,826	20,181	39,562	18,982	24,366	42,499	35,819
Cuban	4,811	7,259	5,591	5,475	3,323	3,380	3,331	3,914	3,155	3,099	3,151
Dalmatian, Bosnian, Herzegovinian	2,036	2,639	4,568	7,393	3,747	1,888	4,911	4,400	3,672	4,520	4,949
Dutch and Flemish	7,832	8,498	9,735	12,467	9,526	8,114	13,012	13,862	10,935	14,507	11,782
East Indian	258	145	271	1,072	1,710	337	1,782	517	165	188	160
English	41,479	50,865	45,079	51,126	49,056	39,021	53,498	57,258	49,689	55,522	47,573
Finnish	10,157	17,012	14,136	14,860	6,746	11,687	15,736	9,779	6,641	12,756	11,923
French	11,557	11,347	10,379	9,392	12,881	19,423	21,107	18,132	18,382	20,652	16,996
German	74,790	82,360	86,813	92,936	73,038	58,534	71,380	66,471	65,343	80,865	74,055
Greek	12,625	12,144	23,127	46,283	28,808	20,262	39,135	37,021	31,566	38,644	42,841
Hebrew	106,236	129,910	153,748	149,182	103,387	57,551	84,260	91,223	80,595	101,330	127,938
Irish	37,076	54,266	40,959	38,706	36,427	31,185	38,382	40,246	33,922	37,023	31,312
Italian (north)	36,699	39,930	46,286	51,564	24,700	25,150	30,780	30,312	26,443	42,534	43,069
Italian (south)	159,329	186,390	240,528	242,497	110,547	165,248	192,673	159,638	135,830	283,613	242,600
Japanese	14,382	11,021	14,243	30,824	16,418	3,275	2,798	4,575	6,172	8,302	8,134
Korean	1,907	4,929	127	39	26	11	19	8	33	64	134
Lithuanian	12,780	18,604	14,257	25,884	13,720	15,254	22,714	17,027	14,078	24,647	19,874
Magyar	23,883	46,030	44,261	60,071	24,378	28,704	27,302	19,996	23,599	30,610	41,536
Mexican	447	227	141	91	5,682	15,591	17,760	18,784	22,001	10,954	12,435
Pacific Islander	41	22	13	3	2	7	61	12	3	11	1
Polish	67,757	102,437	95,835	138,033	68,105	77,565	128,348	71,446	85,163	174,365	115,830
Portuguese	6,338	4,855	8,729	9,648	6,809	4,606	7,657	7,469	9,403	13,566	8,625
Roumanian	4,364	7,818	11,425	19,200	9,629	8,041	14,199	5,311	8,329	13,451	23,039
Russian	3,961	3,746	5,814	16,807	17,111	10,038	17,294	18,721	22,558	51,472	42,667
Ruthenian (Russniak)	9,592	14,473	16,257	24,081	12,361	15,808	27,907	17,724	21,965	30,588	34,608
Scandinavian	61,029	62,284	58,141	53,425	32,789	34,996	52,037	45,859	31,601	38,737	33,264
Scotch	11,483	16,144	16,463	20,516	17,014	16,446	24,612	25,625	20,293	21,293	17,277
Slovak	27,940	52,368	38,221	42,041	16,170	22,586	32,416	21,415	25,281	27,234	24,336
Spanish	4,662	5,590	5,332	9,495	6,636	4,939	5,837	8,068	9,070	9,042	10,406
Spanish-American	1,666	1,658	1,585	1,060	1,063	890	900	1,153	1,342	1,363	1,358
Syrian	3,653	4,822	5,824	5,880	5,520	3,668	6,312	5,444	5,525	9,210	8,465
Turkish	1,482	2,145	2,033	1,902	2,327	820	1,283	918	1,338	2,015	2,639
Welsh	1,820	2,531	2,367	2,754	2,504	1,609	2,244	2,248	2,239	2,820	2,359
West Indian (except Cuban)	1,942	1,548	1,476	1,381	1,110	1,024	1,150	1,141	1,132	1,171	1,276
Other peoples	668	351	1,027	2,058	1,530	1,537	3,330	3,323	3,660	3,038	3,586
Total	812,870	1,026,499	1,100,735	1,285,349	782,870	751,786	1,041,570	878,587	838,172	1,197,892	1,146,752

AN EXCITED METAL MARKET

Never has the New York metal market seen such violent changes in the price of metals as have occurred in the last two weeks. Quotations for tin and antimony have doubled; copper is practically unsaleable in Europe and in the United States sales have been made below 13 cents. Lead and spelter show no change, but the markets are nervous.

Pig Tin—On July 30 the tin market was excited but no sales for 5-ton lots were made above 31c. On the following day with the closing of the London metal exchange, the New York Stock Exchange and the New York Metal Exchange, the breaking down of international credit, the inability to draw bills of exchange, prices were more or less chaotic, but sales were made at 33 cents. Since that time markets for small lots of tin in New York have been represented by the following quotations: Aug. 1, 38c.; Aug. 3, 50 to 55c.; Aug. 4, 55 to 57c.; Aug. 5, 60c.; Aug. 6, 61@63c.; Aug. 7, 64c.; Aug. 8, 65c.; Aug. 10, 67c.; Aug. 11, 70c.

Most of the tin used in the United States comes from Strait Settlements and is shipped direct to London. From there it is shipped on the Atlantic Transport Line, the only line of direct steamers from London to the United States. The usual importation in this country is 1000 tons a week. When the blow fell there were in the United States 1300 tons of tin in official stocks. Of course, the tinplate companies had a surplus above this. With the embargo on shipping, and the refusal of the British government to permit the exportation of any metals, the price jumped rapidly, and the only tin which has arrived since that time in consequence came in on the "Minnehaha" on Monday aggregating 365 tons. There is afloat on high seas for American ports about 1225 tons. What the tin market will do is a question. Suggestions have been made that the U. S. Steel Corporation will send one of its vessels to Singapore to secure tin. This is a possibility. Then, too, there is a possibility that the German fleet must be bottled up and shipping in English and neutral bottoms be resumed on the high seas. This will means a tremendous crash in the price. As far as the metal itself is concerned, it affects mostly the tin plate trade, but it is used so generally in other arts that its advance is likely to be felt in many lines not ordinarily known to be allied with it.

Copper—Approximately 50% of the copper produced in this country is consumed in Europe. Manufacturing has practically ceased on the continent and will in England in the near future, and the price of copper has dropped to under 13c. It is probable that a round lot could be purchased at marked concessions from even 12c. At present the market is represented by a quotation of 12.75c., but this is purely nominal. Producers have taken steps to restruct the output and it will undoubtedly soon be adjusted to consumption. In the meantime, the reports of the Copper Producers' Association will not be issued.

Lead—The market is steady and shows no change, being quoted at 3.95c, New York, and 3.80c. East St. Louis.

Spelter—The war has had no effect on the spelter market as yet, but it undoubtedly will in the near future and cause the metal to advance. Prime Western sells at 4.90 to 5c. in New York, and 4.85c. East St. Louis.

Antimony—This metal, which is used to a limited amount in the making of anti-friction metals and in various compositions, has apparently advanced beyond all limits. Special brands, which a week ago were sold at 7½c., now command 15 to 20c. per pound, and ordinary antimony is selling at 14 to 16c. Most of this metal comes from Germany. It is morevore used in the manufacture of shrapnel and munition of war.

IRON AND STEEL

That the industry is on a sound basis is conceded on all hands. There are no surplus stocks, and prices have settled down to a low point. It is practically impossible to give general quotations on the steel market, for all the large producers are making quotations from day to day. In a brief resume of the several departments of the steel trade which will follow, will be given the last available quotations. Inability to secure ferro-manganese (most of this raw material comes from Russia) is one of the problems concerning the trade at present. This and other difficulties will be solved as they arise; but all will take time. The unfilled order of the U. S. Steel Corporation on Aug. 1, amounted to 4,158,589 tons, an increase of 125,732 tons in the month.

Pig Iron—Sales of iron have been small, but there has been some business, most of it being done at quotations of a month ago. For example, Cincinnati Southern Foundry No. 2 is selling at $13.25 to $13.75 compared with $13.50 to $14 a month ago; Northern Foundry No. 2 is $14.50 to $15, which is also 25c. a ton lower than last month. Northern Foundry No. 3 is $14.25 to $14.50. In New York, Northern Foundry No. 1 is $14.75 to $15; No. 2X, $14.40 to $14.75; No. 2 plain, $14.25 to $14.50. In Chicago, Northern Foundry No. 2 is $13.75 to $14.25, the same as last month; Northern Foundry No. 3, $13.50 to $14. In Pittsburgh, bessemer is $14.90 and basic, $13.90. These quotations include the 90c. freight rate from the valley to Pittsburgh. In Birmingham, Southern Foundry No. 2 is $10 to $10.25. The output of pig iron continues large, that for July having just been computed at 1,957,000 tons. The daily rate of production, however, was the smallest in any month since July 1911, with the exception of January of this year. Stocks are not being accumulated.

Steel Rails—There has been no business at the moment in steel rails, but it is felt that the U. S. Steel Corporation will secure a firmer grasp on foreign markets than it ever had before, and other exporting steel companies are likely to have some satisfactory markets. The rate decision was not of enough benefit to the railroads to permit them to buy new rails except where absolutely necessary to replace worn out materials.

Structural Materials—On Aug. 4 the leading manufacturers of structural shapes withdrew their quotations and now business is only being done as each job comes up. Prices are higher, and are represented by the range of 1.20 to 1.25c. base, which includes I-beams 3 to 15 in., channels 3 to 15 in., angles 3 to 6 in., and tees 3 in. and over. Other quotations are on practically the same basis, subject to the usual charge for extras.

Plates—The general market is represented by a quotation of 1.10 to 1.15c. f.o.b. Pittsburgh. Chicago mill deliveries are 1.30 to 1.35c., and plates from store there are 1.75 to 1.85c. In New York mill shipments are 1.31 to 1.36c. The plate business should improve due to a demand for shipping.

Pipe—The market for pipe, which was one of the brightest of any in the steel market, has suddenly slumped and there is practically no business. The oil producers have been obliged to tie up all their cargo ships. The price of crude oil suddenly declined; therefore there is no demand for pipe. Quotations are unchanged, but there is very little business at these figures.

Sheets—The price of sheets advanced from $1 to $2 per ton. Stocks at the mills are very satisfactory and it is believed that most of the business on the books of manufacturers will be delivered promptly. There seems to be a little improvement in the demand for galvanized sheets. No advance has been made for sheets from New York stock. The following quotations are current for large lots from Pittsburgh and small lots from store New York and Chicago.

	Cents per pound—Carload lots, Pittsburgh		Small lots, Chicago	
Nos.	Black	Galv.	Black	Galv.
10 and 11	1.55	1.85	2.15	2.70
12	1.55	1.95	2.20	2.75
13 and 14	1.60	1.95	2.25	2.75
15 and 16	1.65	2.10	2.35	2.85
17 to 21	1.70	2.25	2.50	3.15
22 and 24	1.70	2.40	2.55	3.30
25 and 26	1.75	2.50	2.55	3.40
27	1.80	2.65	2.60	3.55
28	1.85	2.85	2.60	3.75

Old Materials—The market is so unsettled that it is useless to quote any prices at present.

Coke—The market has not been affected one way or the other and furnace coke is quotable at $1.75 to $2 per net ton at oven for contract, most contracts being at the inside figure, and prompt shipments at $1.75. For 72-hr. furnace coke $2.25 to $2.50 is quoted.

Steel Shapes—Prices are unchanged from last month, but the market is very firm. The quotations are from warehouse New York as follows:

	Cents Per lb.
Refined iron.	
1 to 1⅞ in., round and square	1.80
1½ to 4 in. x ⅜ to 1 in.	1.80
1½ to 4 in. x ¼ to $\frac{5}{16}$ in.	2.00
Norway bars	3.20
Burdens bar iron	3.15
Soft steel:	
¾ to 3 in., round and square	1.80
1 to 6 in. x ⅜ to 1 in.	1.80
1 to 6 in. x ¼ and $\frac{5}{16}$ in.	1.95
Rods—⅝ and ¾ in.	1.90
Bands—1½ to 6 x $\frac{5}{16}$ in. to No. 8	2.10
Beams and channels—3 to 15 in.	1.85
Angles:	
3 in. x ¼ in. and larger	1.85
3 in. x $\frac{5}{16}$ in. and ⅛ in.	2.30
1½ to 2½ in. x $\frac{5}{16}$ in. and thicker	1.95
1½ to 2½ in. x ⅛ in.	2.05
1 to 1¼ in. x $\frac{5}{16}$ in.	2.05
1 to 1¼ in. x ⅛ in.	2.10
1½ to 2½ x ¼ in.	2.00
1½ to 2½ x $\frac{5}{16}$ in.	2.10
3 in. and larger	1.90

Rubber—Prices have doubled in the last week and some grades are almost unobtainable. The London market is closed and the embargo at Continental ports prohibits shipping from Europe. The presence of rival fleets in the Mediterranean means that shipments from the Far East will be suspended by the route. American manufacturers of rubber goods hope the Panama Canal may be used for vessels from the East bringing rubber. Prices are as follows: Up River Para fine, $1.15@1.25, Up River Para coarse 90c., Cancho balls, 72@75c.. Africa rubber 90c.

Scrap rubber has likewise advanced boots and shoes selling at 6½c., automobile tires at 5c. and mine tubes at 17c.

Portland Cement—The market has held well. Cement manufacturers feel that it is no time to cut quotations even though the demand may fall off severely, for there may be a rapid change. It is interesting to note that already some manufacturers are figuring on capturing foreign markets. Most of the cement which has been used in countries where it is not manufactured, has come from Germany or Belgium. These sources of supply now being cut off, it is natural that South America, Africa and Asia will turn to the United States. Probably there will be quite a little cement exported just as soon as transit facilities are provided and there is a means of shipment.

An Announcement by Walter Wood, surviving and liquidating partner, that the partnership formerly existing between Walter Wood and Stuart Wood, under the name of R. D. Wood & Co., was terminated by the death of Stuart Wood on March 2d. The business of the old firm is being liquidated by the surviving partner. The trade heretofore carried on under the name of R. D. Wood & Co. will still be continued under that name by Walter Wood. For more than 110 years, the company has been manufacturing water works supplies, sugar house machinery, and gas producers. The office of the company will continue as heretofore, 400 Chesthut St., Philadelphia, with foundries at Millville, Florence, and Camden, N. J.

COUNTRYWIDE GAIN IN BUILDING

For the first time in many months, the reports of building inspectors, relative to the contemplated building from plans filed, show a gain in all parts of the country. In the East, where the depression has been particularly marked heretofore, there is a gain of 19% in the 21 cities. Expressed in dollars, this amounts to $4737. For the first seven months of the year there was a trifling loss.

In 21 cities in the Middle West there was a gain of $1,600,000, or 7.7%, in July. For the first seven months of the year, the gain amounted to $5,769,000, or 3.8%.

The returns for seven Pacific Coast cities show an increase of $340,000, or less than 1%. The gain, slight as it is, shows a turning point, for the loss in the first seven months amounted to $4,200,000, which is about 7.3%.

An excellent gain of over one million dollars in seven Southern cities shows an increase of about 56%, while the figures for the first seven months of the year also show a gain.

EASTERN STATES

	Month of July		First Seven Months of Yr.	
	1914	1913	1914	1913
Albany, N. Y.	$692,005	$315,770	$4,676,465	$2,185,035
Baltimore, Md.	1,577,601	394,089	8,339,787	5,775,493
Boston, Mass.	298,500	1,112,550	12,895,350	12,413,405
Bridgeport, Conn.	313,945	193,727	2,486,083	1,655,046
Buffalo, N. Y.	985,000	908,000	7,549,006	7,394,243
Elizabeth, N. J.	179,190	183,883	888,123	1,621,714
Hartford, Conn.	311,985	970,055	2,685,356	3,116,600
Hoboken, N. J.	166,100	14,000	728,002	252,142
Jersey City, N. J.	460,592	347,304	2,417,845	3,983,952
Newark, N. J.	1,172,043	1,307,089	5,244,200	9,531,080
New Haven, Conn.	427,215	364,486	2,405,625	2,461,098
New York, N. Y.				
Manhattan	4,605,350	7,807,500	30,882,090	42,860,635
Bronx	2,123,465	1,143,650	16,076,038	16,515,406
Brooklyn	3,314,700	2,574,760	25,918,850	19,114,311
Queens	2,339,662	1,311,488	13,139,829	10,499,944
Paterson, N. J.	229,546	253,599	1,078,457	1,011,209
Philadelphia, Penn.	4,661,850	3,446,965	25,767,570	24,786,235
Pittsburgh, Penn.	1,510,212	777,128	10,851,148	9,998,144
Reading, Penn.	103,600	81,425	1,013,800	507,100
Rochester, N. Y.	1,067,101	511,733	6,095,625	5,898,092
Scranton, Penn.	167,155	133,510	752,464	885,318
Springfield, Mass.	795,835	274,236	3,536,899	3,022,658
Syracuse, N. Y.	753,095	263,165	1,772,100	2,357,220
Worcester, Mass.	477,764	385,999	3,118,452	3,114,614
Totals	$29,733,511	$24,996,102	$190,319,268	$190,940,694
	Gain 19%		Loss trifling	

SOUTHERN STATES

	1914	1913	1914	1913
Atlanta, Ga.	$495,902	$434,943	$3,495,699	$3,544,100
Chattanooga, Tenn.	116,370	53,690	749,810	684,565
Louisville, Ky.	482,390	348,980	3,040,245	2,636,490
Memphis, Tenn.	333,006	304,266	2,347,888	2,861,290
Richmond, Va.	461,949	147,435	2,561,770	2,216,105
Tampa, Fla.	92,545	110,183	814,640	856,668
Washington, D. C.	1,192,883	708,160	6,820,702	6,200,233
Totals	$3,175,045	$2,107,657	$19,830,754	$19,154,451
	Gain 56%		Gain trifling	

PACIFIC COAST STATES

Los Angeles, Calif.	$2,100,451	$3,324,214	$11,889,271	$20,333,004
Oakland, Calif.	430,665	660,588	2,869,170	5,128,131
Portland, Ore.	870,745	851,805	5,051,655	8,251,700
Spokane, Wash.	229,635	168,765	775,297	2,356,589
San Francisco, Calif.	2,068,537	1,415,819	22,746,212	12,931,055
Seattle, Wash.	2,520,590	1,414,620	8,404,445	6,634,090
Tacoma, Wash.	884,649	529,599	1,572,747	1,847,999
Totals	$9,105,272	$8,765,410	$53,308,797	$57,482,568
	Gain 1%		Loss 7.3%	

MIDDLE WEST

Akron, Ohio	$382,015	$707,265	$2,355,085	$3,538,180
Chicago, Ill.	468,385	6,035,000	45,227,585	57,368,637
Cincinnati, Ohio.	1,055,230	582,430	6,044,000	5,543,036
Cleveland, Ohio.	2,532,050	2,746,310	17,221,415	12,567,150
Columbus, Ohio.	503,351	421,945	3,724,206	3,118,748
Dallas, Tex.	941,580	806,250	4,425,143	5,966,355
Denver, Colo.	222,223	254,670	1,686,803	1,811,845
Des Moines, Iowa	140,690	131,164	1,158,364	1,193,284
Duluth, Minn.	266,259	236,413	1,946,841	2,952,557
Evansville, Ind.	128,645	122,990	946,814	1,091,947
Grand Rapids, Mich.	169,855	242,782	2,476,363	1,690,097
Indianapolis, Ind.	1,140,000	1,120,566	6,096,405	6,231,473
Kansas City, Kan.	188,005	52,942	779,125	761,518
Kansas City, Mo.	8,013,930	857,475	15,013,930	6,125,951
Milwaukee, Wis.	887,889	1,737,067	6,398,666	8,017,059
Minneapolis, Minn.	1,326,095	1,055,770	11,099,690	6,986,470
Omaha, Neb.	402,605	392,525	3,269,298	2,447,548
St. Louis, Mo.	1,287,859	1,045,730	9,105,911	10,412,307
St. Paul, Minn.	1,053,100	933,655	8,971,788	5,598,049
Salt Lake City, Utah.	238,750	149,740	1,635,064	1,299,478
Toledo, Ohio.	569,579	671,605	4,413,217	3,504,932
Totals	$21,918,094	$20,304,294	$153,995,713	$148,226,621
	Gain 7.7%		Gain 3.8%	

CATALOG NOTICES

The Waterproofing & Construction Co., 35 Wall St., New York. Pamphlet. Cement Waterproofing. Illustrated, 4x9 in.

C. E. Hunter Co., 2208 South Wabash Ave., Chicago, Ill. Catalog. McGuire garbage incinerator. Illustrated, 7x10 in.

National Tube Co., Pittsburgh, Penn. Bulletin No. 13A. N. T. C. iron body brass mounted wedge gate valves. Illustrated, 12 pp., 8½x11 in.

RAILWAYS

New York—Carthage & Copenhagen R. R.—This company, it is reported, plans to construct an extension from Copenhagen, N. Y., to connect with the Lehigh Valley R.R., at Camden, N. Y. F. D. Barlow, Carthage, N. Y., is Gen Mgr.

North Carolina—Durham & Southern Ry.—This company plans to construct an extension from Dunn, N. C., to Mount Olive, N. C., 50 miles. J. E. Stagg, Durham, N. C., is Vice-Pres.

Georgia—Chattahoochee Valley Ry.—This company plans to construct an extension out of McCulloh, Ga. J. T. Barker, West Point, Ga., is Gen. Mgr.

Moultrie Southern Ry.—This company has been incorporated for the purpose of constructing a railroad from Moultrie, Ga., to a point near Decatur, Ga., about 85 miles. W. E. Ayrock, Moultrie, is interested. Noted July 23.

✚Florida—St. Andrews Bay Ry. & Terminal Co.—This company has awarded the contract to J. M. WILLIS, St. Andrews Bay, Fla., for constructing a five-mile extension. E. L. Wood, St. Andrews Bay, is Ch. Engr.

Florida—Atlantic Coast Line R. R.—This company, it is reported, plans to construct an extension from Sebring, Fla., south to Big Cypress Swamp. E. B. Pleasants, Wilmington, N. C., is Ch. Engr.

Seaboard Air Line Ry.—This company plans to construct an extension 20 miles long from Bartow, Fla., in a southeasterly direction. W. D. Faucette, Norfolk, Va., is Ch. Engr.

Alabama—Birmingham & Southeastern Ry—This company has made financial arrangements for the construction of its proposed extension from Eclectic, Ala., to Birmingham, Ala. W. M. Blount, Union Springs, Ala., is Pres.

Louisiana—Texas & Pacific Ry.—This company, it is reported, plans to double-track its line from New Orleans, La., to Alexandria, La., 194 miles. C. H. Chamberlin, Dallas, Tex., is Ch. Engr.

Ohio—Chesapeake & Ohio Ry.—This company plans to spend $100,000 for additional tracks at its yards at Logan, Ohio. F. I. Cabell, Richmond, Va., is Ch. Engr.

Indiana—Pennsylvania Lines West of Pittsburgh—See item under Illinois.

Illinois—Pennsylvania Lines West of Pittsburgh—This company has secured the right of way for a third track between Chicago, Ill., and Logansport, Ind. Thomas Rodd, Pittsburgh, Penn., is Ch. Engr.

Illinois—La Salle Terminal Ry.—Isham Randolph & Co., Chicago, Ill., Consult. Engrs., have completed the final surveys for this company's proposed line from La Salle to Oglesby, Ill., and have turned the determinations over to the promoters of the proposition who are behind the Chicago, St. Louis & Gulf Transportation Co., which has inaugurated a large freight service on the Illinois & Michigan Canal, to Illinois and Mississippi River points. The railway project calls for a connecting belt line tapping the large cement plants in the La Salle District and other industries in the vicinity. Measures will be taken soon looking toward the construction of an interurban line connecting La Salle, Peru and Sterling, Ill., tapping a rich section of country unserved by adequate transportation. It is expected that this project will be fostered by the leading industries in the territory. The La Salle Terminal Ry. will require a number of steel structures over intersecting steam lines, including a swing-span over the Illinois River south of La Salle. The line has been located with a view to handling a large share of the traffic originating in the vicinity in addition to transfer business. Noted July 3.

Minnesota—Minneapolis, St. Paul & Sault Ste. Marie Ry.—This company is acquiring right of way for its proposed Thief River and International branch line. C. N. Falls, Minneapolis, Minn., is Ch. Engr.

✚North Dakota—Northern Pacific Ry.—This company has awarded the contract to COOK CONSTRUCTION CO., Gilfallan Block, St. Paul, Minn., for grading for the proposed line south of Beach, N. D. Noted June 25.

Montana—Great Falls Western Ry.—This company has been incorporated in Montana to construct a 115-mile railroad from a point in Cascade County to a point in Powell County. C. L. Whiting, Lewistown, Mont., is interested.

Texas—Gulf, Texas & Western Ry.—The State Railroad Commission has granted the application of this company to issue $470,000 in bonds for improvements. B. B. Cain, Dallas, Tex., is Vice-Pres. and Gen. Mgr.

Texas—The State Railroad Commission, July 28, Austin, Tex., approved plans for the proposed interlocking system to be installed in connection with the terminals of the Union Terminal Co., at Dallas, Tex.

Oregon—Roach Timber Co.—This company will award the contract soon for the construction of 14¾ miles of railroad east from Sutherlin, Ore. The company's offices are located at Sutherlin.

California—Niland-Blythe R. R. Association—This association has been formed for the purpose of constructing a railroad from a point near Blythe, Calif., to Midland, Calif. A. E. Hull, Vanl Nuys Bldg., Los Angeles, Calif., is interested.

Ontario—Erie & Ontario R. R.—This company has been incorporated with a capital of $500,000, to construct a line from Port Maitland on the Toronto Hamilton & Buffalo Ry. and from Port Maitland east to Port Colborne, an additional 20 miles. Surveys are being made. J. N. Beckley, Rochester, N. Y., Pres. of the Toronto Hamilton & Buffalo Ry., is Pres. of the above company.

Finishing the Water Works at Panama—The contract for furnishing the pipe and some of the fittings required for the new water main to be laid from the south end of the Panama R. R. bridge at Gamboa, to the aeration basin on the hill above the Miraflores spillway, has been awarded to The United States Cast Iron Pipe & Foundry Co., 71 Broadway, New York, N. Y.

ELECTRIC RAILWAYS

Niagara Falls, N. Y.—Practically all of the right-of-way has been obtained by the Frontier Electric Ry., for the construction of an electric railway to connect Niagara Falls, Buffalo, Tonawanda and North Tonawanda. James S. Simmons, Niagara Falls, is Gen. Mgr.

Camden, N. J.—The Public Service Ry. Co. has applied to the City Council for permission to double-track its line on the White Horse Pike. R. E. Danforth, Newark, is Gen. Mgr.

Lancaster, Penn.—According to press reports the Conestoga Traction Co., the Fair Association and the North Lancaster Development Co. are taking steps toward the construction of an electric railway from Lancaster to the fair grounds.

Waynesville, N. C.—The Waynesville & Canton Electric Ry. Co. will not construct its proposed 12-mile extension to connect Hazlewood and Canton, due to inability to secure financial backing. Henry T. Shary, Asheville, is interested.

Pelham, Ga.—The Cairo, Pelham & Moultrie Ry. Co. has been recently incorporated with $75,000 capital by J. J. Hill, and D. Turner, Pelham, and others and will construct an interurban railway from Pelham to Moultrie, about 50 miles.

Clearwater, Fla.—The City Council has granted a franchise to C. H. Evans, Clearwater, to construct an electric railway in Clearwater.

Charlotte, Mich.—A. B. Woods, Corunna, Mich., is reported to be interested in the construction of an electric railway from Charlotte to Albion, about 20 miles.

Bonner Springs, Kan.—The Kansas City, Kaw Valley & Western Ry. Co. will soon commence construction on the extension of its line from Bonner Springs to Lawrence. J. W. Richardson, 303 Delaware St, Leavenworth, Kan., is Gen. Supt.

Casper, Wyo.—The Casper Street Ry. Co., recently incorporated with $100,000 stock, will build an electric railway in Casper from Burlington depot to the southern boundary. John Fleming, Casper, is Pres.

Cotter, Ark.—X. V. Loba, Mountain Home, Ark., is interested in the construction of an electric railway from Cotter, Ark., to Mansfield, Mo.

Blue Ridge, Tex.—The Greenville & Whitewright Interurban Co., which has completed the construction of an interurban electric railway between Anna and Blue Ridge, is preparing to extend the line to either Whitewright or Greenville.

Dallas, Tex.—William Doran of the Business Men's Committee of Dallas has retained Frederick A. Jones Co., Dallas, to make surveys for the proposed interurban electric railway, to be constructed between Dallas and Wichita Falls.

Palestine, Tex.—W. P. Brashier, of Corpus Christi, is preparing to construct a street railway system at Palestine. He will soon make application to the City Council for the necessary franchise for the use of certain streets.

San Antonio, Tex.—It is announced by W. B. Tuttle, Vice-Pres. of the San Antonio & Austin Traction Co., that the project of constructing an interurban electric railway between San Antonio and Austin has been temporarily abandoned due to unsatisfactory business conditions in the country, as a result of the European war.

Phoenix, Ariz.—R. W. Martin of New York and associates have purchased the franchise and other holdings of the Salt Valley Electric Co. and will construct an interurban electric railway between Phoenix and Mesa via Tempe, a distance of 18 miles. An electric power station will be built in connection with the project.

Everett, Wash.—The Everett Ry. Light & Water Co. will extend its tracks from the depot to the main part of the town. Stone & Webster, 147 Milk St., Boston, Mass., are the Mgrs.

Portland, Ore.—The Portland & Oregon City Ry. Co. has received a franchise from the City Council to construct an electric railway through the eastern section of the city to connect with the line being built from Oregon City to Portland. Noted Apr. 23.

Niland, Calif.—The Niland-Blythe Railroad Association has been organized for the purpose of constructing an electric railroad from Niland to Blythe. Arthur E. Hull, Los Angeles, is Pres.

Orange, Calif.—Preliminary surveys are being made by the Pacific Electric Ry. Co. for the construction of an electric railway from Orange to Brea. J. McMillan, Los Angeles, is Gen. Mgr.

Redwood, Calif.—The Redwood Harbor Co. contemplates the construction of an electric railway to connect the foothills country with the waterfront.

LIGHT, HEAT AND POWER

★**Bedford Hills, N. Y.**—The following bids were received July 28, by the Board of Managers of the New York State Reformatory for Women, for a boiler plant, piping and conduit system: R. T. Ford Co., Rochester, $22,897; Wall Engineering & Contracting Co., Inc., New York, $23,000; Evans, Almirall & Co., New York, $23,475; the W. B. Armstrong Co., Albany, $23,490; Gillis & Geoghegan, New York, $24,000. Noted July 23.

Westfield, N. Y.—At an election held July 25, the citizens voted in favor of a bond issue of $7100 for the purpose of repairing and extending the municipal electric-lighting system. E. E. Peeke is Supt.

Bayonne, N. J.—The Public Service Electric Co. has made an offer to the city to place all wires underground, at an expenditure of $25,000 for the first year, and $10,000 each succeeding year until the work is completed.

Bordentown, N. J.—The City Commission is considering the installation of a municipal electric lighting plant, estimated to cost about $40,000.

Camden, N. J.—The Public Service Electric Co. has made an agreement with the city to place all of its wires underground. The company agrees to complete the work in 10 years, at an annual expenditure of $25,000. L. E. Farnham is City Engr. Noted July 9.

Elizabeth, N. J.—It is reported that the Singer Mfg. Co., manufacturer of sewing machines, will build a new power station at its plant at Elizabethport.

✚**Newark, N. J.**—The Board of Education has awarded the contract for the installation of heating and ventilating apparatus at the North Seventh St. School to JOHN J. COONEY, Harrison, N. J., at $21,787.

South Amboy, N. J.—The Middlesex & Monmouth Light, Heat & Power Co. has applied to the Board of Chosen Freeholders of Middlesex County, New Brunswick, for permission to construct a transmission line from South Amboy to Whale Creek.

Gettysburg, Penn.—The Town Council has adopted a resolution providing for the establishment of a municipal electric-light plant. An engineer will be engaged at once to prepare plans and estimates for the plant.

Philadelphia, Penn.—The Philadelphia Electric Co. has awarded the contract for the construction of a power house on Christian St., near Schuylkill Ave., to the FIDELITY CONSTRUCTION CO. The plant will cost about $1,000,000, and the equipment will include two turbo-generators, of 30,000 and 35,000 hp. respectively. It will furnish power to operate the Pennsylvania R.R. from the Broad St. Station to Paoli, Penn.

Kinston, N. C.—It is reported that Gilbert C. White, Charlotte, N. C., has been engaged to supervise the reconstruction of the municipal electric-light plant.

Fort Meade, Fla.—An election will be held Aug. 21 to vote on the question of a bond issue of $25,000 for the purchase or construction of a municipal electric-light plant.

Maben, Miss.—The Board of Aldermen has granted a franchise to F. H. Mudd for the establishment of an electric light plant in Maben. It is expected to have the plant in operation within three months.

Cave City, Ky.—The Cave City Ice Co. contemplates the installation of an electric-light plant in connection with its present equipment.

Louisville, Ky.—Bids will be received until Aug. 19, by S. D. Jones, Business Mgr. of the Board of Education, for the installation of heating and ventilating equipment in the Flat Lick School.

Cincinnati, Ohio—(Official)—Bids will be received until noon, Sept. 1, by the New Courthouse Building Commission of Hamilton County for heating and ventilating, electrical work, elevator equipment and a power plant for the new Courthouse and County Jail. Rankin, Kellog & Crane, 1012 Walnut St., Philadelphia, Penn., are the Archs. James A. Green is Pres. of the New Courthouse Bldg. Comn.

Cleveland, Ohio—Bids will be received until noon, Aug. 21, by the Commissioner of Purchases and Supplies, City Hall, for the construction of the Walworth Ave. substation for the municipal electric-light system. The building will be of brick and reinforced concrete, two stories, 47x101 ft. It will cost about $30,000. F. W. Ballard is Comr. of Light and Heat.

Hamilton, Ohio—It is reported that another unit will shortly be added to the municipal electric-light plant at a cost of about $55,000. Joseph Myers is Dir. of Pub. Ser.

Mason, Ohio—Plans have been completed for the establishment of a municipal electric-light plant, for which $14,000 in bonds have been issued.

Sycamore, Ohio—Bids will be received until Aug. 14, by the Board of Trustees of Public Affairs, O. J. Niebel, Clk., for improvements and repairs to the municipal electric-light plant and water-works. George Champe, 610 Nasby Bldg., Toledo, is Consult. Engr.

Gary, Ind.—The City Council has granted a 25-year franchise to Sugwald Moe, C. H. Maloney and Henry A. Vossler, all of Gary, for the construction and operation of a central heating plant. The initial cost will be about $200,000.

✚**Tell City, Ind.**—The contract for rebuilding the municipal electric-light plant has been awarded to the GENERAL ELECTRIC CO., Schenectady, N. Y., at $13,055. Noted July 2.

Escanaba, Mich.—The Escanaba Traction Co. will construct a third dam and hydro-electric plant on the Escanaba River. The power house will be located just below Chandler Falls, and will generate 1000-hp. P. L. Utley is Secy. and Gen. Mgr. of the Escanaba Traction Co.

Saginaw, Mich.—(Official)—The city is considering the instalation of a municipal electric lighting system, estimated to cost about $250,000. Herman H. Eymer is City Engr.

✚**Denison, Iowa**—The City Council has awarded the contract for the construction of a building for the municipal light plant to FEE & COBLER, Denison, at $5740; the contract for the equipment of the plant was awarded to the McGRAW ELECTRIC CO., Omaha, Neb., at $22,974. Noted July 9 and July 23.

✚**Manilla, Iowa**—The City Council has awarded the contracts for the municipal electric-light plant to the MID-WEST ELECTRIC CO., Omaha, Neb., at $12,178 for the equipment of the building, to include a 120-hp. Diesel oil engine and a 75-kw. dynamo. The contract for overhead equipment was awarded to the STANDARD ELECTRIC CO., Waterloo, Iowa, at $4830. Noted Apr. 23.

✚**Buhl, Minn.**—The contract for improvements to the municipal electric-light plant and water-works has been awarded to R. B. WHITAKER & CO., St. Paul. The work will include building a new tank and smokestack and installing some new equipment.

Ceylon, Minn.—The City Council has engaged Earle D. Jackson, St. Paul, to prepare plans for the construction of a municipal electric-light plant, for which $8000 in bonds have been ssued. F. H. Koenecke is City Clk.

✚**Owatonna, Minn.**—The State Board of Control, Minneapolis, has awarded the contract for heating, lighting and plumbing in the State Public School at Owatonna to the CLEFTON CO., Owatonna, at $16,467.

Virginia, Minn.—Bids will be received until 7 p.m., Aug. 17, by the Water & Light Department, for the construction of a high-pressure gas plant. J. W. Murphy is Secy. of the Water and Light Comn.

Erwin, S. D.—The city is contemplating the installation of a municipal electric-lighting system.

Parker, S. D.—Bids will be received until Aug. 25, by C. L. Jones, City Audr., for the construction of a municipal electric-light, heat and power plant. The estimated cost is $20,000. The Oscar Claussen Engineering Co., Commercial Bldg., St. Paul, Minn., is Engr.-in-Charge. Noted June 11 and July 9.

Auxvasse, Mo.—M. R. Kennedy has made application to the Public Service Commission for permission to construct and operate an electric-light plant in Auxvasse.

Linn Creek, Mo.—Plans are being prepared for the construction of a hydro-electric plant on the Niangua River, near Linn Creek. It will include five dams of 40 to 50-ft. heads between Linn Creek and Bennett's Mills, and a steel tower transmission system to distribute electricity within a radius of 100 miles. L. C. Scott is interested. Noted Jan. 22 and Mar. 5.

Bogata, Tex.—Roy Riggs, Brownwood, Tex., is interested in the organization of a company to establish an electric-light and power plant in Bogata.

Paris, Tex.—The electric power plant which the Texas Power & Light Co. will build in Paris will be equipped with three 500-hp. improved Deisel engines with a full complement of electrical machinery. A transmission line will be built by the company from Paris to Bonham.

McLoud, Okla.—(Official)—Bids will be received by the Board of Trustees until 2 p.m. Aug 17, for the construction of transmission lines and a system of street-lighting. The Benham Engineering Co., American National Bank Bldg., Oklahoma City, is Eng. in Charge. Noted June 25.

Mangum, Okla.—At a recent election, the citizens voted in favor of a bond issue of $100,000, to be used for the purchase of the electric-light, water and ice plant.

Culdesac, Idaho—The City Council has granted a franchise to W. L. Marrs, Cœur d'Alene, to construct and operate an electric-light plant to serve the town and immediate vicinity. Construction work will begin shortly.

Tolchaco, Ariz.—F. G. Baum, San Francisco, Calif., and associates will construct a dam across the Little Colorado River near this point and will erect a hydro-electric plant to provide power for operating mines and other industries. It is proposed to construct transmission lines to Globe, Hayden and Ray, more than 175 miles distant from the proposed main power plant. The dam will impound 447,500 acre ft. of water and will afford a sufficient supply to irrigate a large tract of land. Mr. Baum has filed the plans for the work in the State Land Office at Phœnix.

Tucson, Ariz.—The Federal Light & Power Co. will spend $170,000 for improvements on the Tucson Rapid Transit Co. and the Tucson Gas, Electric Light & Power Co. About $100,000 will be used for power-house extensions, $40,000 for street-railway improvements, $10,000 for gas plant and $20,000 for the extension of transmission lines for irrigation pumping.

Hemet, Calif.—The Board of City Trustees is considering the installation of a municipal power plant to furnish electricity for light and power.

Bolton, Ont.—The ratepayers have voted to take over the plant of the Light, Heat & Power Co., and will spend about $10,000 for the installation of a new hydro-electric system.

St. Catherines, Ont.—(Official)—A new hydro-electric system is now under construction for the city, to cost, when fully completed, about $116,000. All contracts for the work have been awarded. J. S. Campbell is Chn. of the Hydro-Electric Comn. Noted July 9.

St. Thomas, Ont.—The City Council has appropriated $20.000 for extensions and improvements to the municipal gas plant.

✚Shoal Lake, Man.—The City Council has awarded contracts for the construction of a municipal power plant to: E. R. SNIDER, Shoal Lake, for building; CANADIAN GENERAL ELECTRIC CO., Winnipeg, Man., to furnish generator, switchboard and pole line materials and construction; the REFRIGERATION & ENGINEERING CO., Winnipeg, for a Campbell oil engine. Total cost, $21,200. Noted May 14.

Moose Jaw, Sask.—Bids will be received until noon, Aug. 26, by the City Commissioners for furnishing high pressure steam pipes and appliances for a 3500-hp. plant. James Pascoe and W. F. Heal are Comrs.

Calgary, Alta.—The Western Canada Flour Mills, Ltd., has had plans prepared by Theodore Kipp, Union Trust Bldg., Winnipeg, Man., for the construction of a power house at its plant.

BRIDGES

Ashland, Mass.—Bids will be received until Aug. 15 by Charles T. Dearborn, Chn. of the Bridge Com., for the construction of a reinforced concrete bridge on Concord St.

✚Cambridge, Mass.—(Official)—The Commissioners of Middlesex County have awarded the contract for the construction of a road and concrete bridge in the towns of Medfield and Sherborn to the CHARLES J. JACOBS CO., 107 Terrace St., Roxbury, Mass., at $10,238. Other bidders were: Hyde Park Construction Co., Boston, $10,960; H. d'Ippolite & Co., Wrentham, $11,906; Hapgood Frost Co., Wellesley, $12,693; Hancock Engineering Co., $12,720; B. Perini & Co., Ashland, $12,703. Noted July 30.

★Charlotte, N. Y.—(Official)—The following bids were received Aug. 6, by the Monroe County Building Commission, Rochester, for the construction of a bridge across the Genesee River at Charlotte: Double leaf bascule bridge, (a) Strauss double leaf bascule, (b) Scherzer double leaf bascule, (c) Rall double leaf bascule; Penn Bridge Co., (a) $231,940; Lupfer & Remick, (a) $255,002, (b) $240,008, or $233,708 with cylinders on west end; Strobel Steel Construction Co., (c) $244,962; McHarg-Barton Co., (a) $248,343 with concrete fixed superstructure, or $262,975 for official plans, (c) $245,496 with concrete fixed spans, or $260,078 with steel fixed superstructure; Seneca Engineering Co., (a) $262,466; R. T. Ford Co., (a) $275,684; P. J. Carlin Construction Co., (a) $276,749. For a single leaf bascule and swing bridge, the bidders were: (a) Bobtail swing bridge, (b) Strauss single-leaf bascule, (c) Rall single-leaf bascule; Penn Bridge Co., (a) $207,023 with plank floor, or $225,023 with pavement, (b) $226,457; Strobel Steel Construction Co., (a) $235,152; R. T. Ford Co., (a) $237,335 with plank floor, or $243,705 with pavement; Lupfer & Remick, $239,008 for Scherzer single-leaf with cylinders, $260,708 for Brown single-leaf with cylinders, or $266,308 for Brown single-leaf, official plan otherwise; McHarg-Barton Co., (c) $242,996 with concrete fixed superstructure, or $257,628 with steel fixed superstructure; Seneca Engineering Co., (b) $244,950, or $269,192 for straight swing bridge. The contract will probably be awarded on Sept. 2. Noted Dec. 11 and Dec. 25, 1913, Apr. 23 and June 11, 1914.

★Norwich, N. Y.—(Official)—The Town Board has rejected all bids received Aug. 5 for the construction of a reinforced concrete bridge over Chasawacta Creek, as exceeding the appropriation. New bids will be received until 1:30 p.m. Aug. 19. C. E. Harris, Sturdevant Blk., Norwich, is Engr. Irving D. Tillman is Town Clk. Noted July 30.

Syracuse, N. Y.—Plans are being prepared for the construction of a new bridge at Oxford St., for which there is an appropriation of $11,000, and for rebuilding the West Newell St. Bridge for which $10,000 is available. Both bridges will span Onondaga Creek, and will be of the box-girder type, with one roadway and two sidewalks. W. T. Wooley is City Engr.

Troy, N. Y.—The Troy & West Troy Bridge Co. is having plans prepared for the construction of a bridge across the Hudson River. Bids will be asked about Sept. 1.

✚Yonkers, N. Y.—The Board of Contract and Supply has awarded the contracts for the construction of two bridges over the Bronx River between Yonkers and the Town of Eastchester to NICHOLAS FAGNANI, Tuckahoe, at $8416 for the bridge at Front Ave., and to WILLIAM M. KNOX, New York, N. Y., at $7945 for the bridge at Palmer Ave. Both bridges will be of reinforced concrete.

Bids will be received until Sept. 8 by the Board of Contract and Supply for the erection of a reinforced concrete bridge at Dewitt Ave.

Elizabeth, N. J.—The Boards of Chosen Freeholders of Union and Hudson Counties have instructed their engineers to prepare preliminary plans and estimates of the cost of a bridge across Newark Bay, connecting Elizabethport and Bayonne, the bridge to be built jointly by the two counties. Jacob L. Bauer, Elizabeth, is County Engr. of Union County. Noted Dec. 4, 1913.

Newark, N. J.—The Board of Chosen Freeholders of Essex County has instructed Frederick A. Reimer, County Engr., to prepare plans for a bridge over the Passaic River at Elwood Ave., connecting the Woodside section with Arlington. It will be of the lift type, 60 ft. wide, and about 3000 ft. long. The estimated cost is $800,000.

New Brunswick, N. J.—Bids will be received until Aug. 24 by the Board of Chosen Freeholders of Middlesex County for the construction of a concrete slab bridge over Deep Run on the South Amboy-Bordentown Turnpike. Alvin B. Fox, Perth Amboy, is County Engr.

Trenton, N. J.—The Board of City Commissioners has approved revised plans for the construction of bridges over the canal at Greenwood and at Hamilton Aves. J. R. Fell, Jr., is City Engr.

Butler, Penn.—(Official)—Bids will be received until noon, Aug. 20, by the Commissioners of Butler County for the construction of a reinforced concrete bridge over a branch of Buffalo Creek, Clearfield Township, and for a creosoted plank and block floor in the Bonnie Brook Bridge. W. B. Scott is Clk. of Comrs.

Philadelphia, Penn.—Bids will be received until Aug. 14 by Morris L. Cooke, Dir. Dept. of Pub. Wks., for the construction of a bridge at Warrington Ave., known as the 71st St. Bridge.

✚Sunbury, Penn.—The County Controller and the Commissioners of Northumberland County have awarded the contract for the construction of a steel truss bridge over Shamokin Creek at Keefer's Station to REIMARD BROS., Bloomsburg, Penn., at $5280. Other bids were: Groten Bridge Co., $5900; C. L. Remsey & Peter Barr, $6113, and Whitaker & Diehl, $6237.

★Baltimore, Md.—(Official)—Bids will be received until noon, Sept. 15, (change of date from Aug. 13) by the State Roads Commission, Garrett Bldg., for the construction of the Hanover St. Bridge. For details, see advertisement under Contracts To Be Let. Noted July 30.

★Petersburg, Va.—(Official)—Bids will be received until noon, Aug. 17, by the Street Committee of the City Council for the construction of a steel bridge over the Appomattox River to Pocahontas. R. D. Budd is City Engr. Noted July 9.

Sussex, Va.—(Official)—Bids will be received until noon, Aug. 20 by the Circuit Court of Sussex County for the construction of three steel bridges, each 37 ft. long, across the Assomoosic Swamp, about six miles from Homeville. The Childrey Co., Richmond, Va., is Engr.-in-Charge.

Louisville, Ky.—The lowest bid received by the Board of Public Works for the construction of the Dupuy St. Bridge was that of J. H. Cahill at $13,855. There were seven other bidders. Noted July 30.

✚Whitesburg, Ky.—(Official)—The Fiscal Court has awarded the contract for the construction of three bridges in Letcher County to the CHAMPION BRIDGE CO. at about $8500, using its own plans. Bidders on the state plans were: East St. Louis Bridge Co., $11,020; Empire Bridge Co., $10,890; Rochester Bridge Co., $11,040; Champion Bridge Co., $11,900 and the International Steel & Iron Construction Co., $11,650. Noted July 2.

Cincinnati, Ohio—Bids will be received until noon, Aug. 28, by the Board of Commissioners of Hamilton County for the construction of a concrete bridge on Baughman Road. Albert Reinhardt is Clk. of Comrs.

+Cleveland, Ohio—The Board of Commissioners of Cuyahoga County has awarded the contract for the construction of the Brooklyn-Brighton Bridge to the BATES & ROGERS CONSTRUCTION CO., 37 West Van Buren St., Chicago, at $542,137. Noted June 25, July 30 and Aug. 6.

Dayton, Ohio—As soon as the flood protection plans of the Conservancy District are completed, the city will construct underpinnings for a concrete bridge, will build one new bridge over the Miami River and two over the Mad River. G. C. Cummin is City Engr.

Hamilton, Ohio—The Board of Commissioners of Butler County has received the following bids for the construction of a bridge over the Miami River at Woodsdale: (a) concrete, (b) steel, A. J. Yawger & Co., Indianapolis, (a) $84,426; Vang Construction Co., Cumberland, Md., (a) $91,741; Pan American Bridge Co., Greencastle, Ind., (a) $103,500, $94,400, (b) $69,600; Gabler & Dieter, Dayton, (a) $98,000, $74,000, $78,000, $78,749; Hackedorn Construction Co., Indianapolis, Ind., (a) $75,860; Cleary-White Construction Co., Chicago, (a) $77,977; $78,278, $85,785; Oregonia Bridge Co., (b) $59,000, $57,000, $56,000 and $61,300. Noted July 23.

Lima, Ohio—(Official)—Bids will be asked about Nov. 1, by the City Council for the construction of the Pine St. Bridge. Chester & Fleming, Union Bank Bldg., Pittsburgh, Penn., prepared the plans. The estimated cost is $30,000. Joseph Askins is Dir. of Pub. Ser. Noted July 23.

+Mount Gilead, Ohio—(Official)—The Board of Commissioners of Noble County has awarded the contract for the construction of a bridge in Chester Township to the OHIO CONCRETE SUPPLY CO., Fremont, Ohio, at $3950; the contract for a bridge in Washington Township was awarded to the BROOKVILLE BRIDGE CO., Brookville, Ohio, at $1867. Noted July 23.

+Youngstown, Ohio—(Official)—The City Council has awarded the contract for the construction of a reinforced concrete bridge across Andrews Hollow at Fifth Ave. to N. R. PORTERFIELD, 17 Battery Place, New York, N. Y., at $31,268. Noted July 30.

+Boonville, Ind.—(Official)—The Board of Commissioners of Warrick County has awarded the contract for the construction of 15 bridges in the county to the VINCENNES BRIDGE CO., Vincennes, at $7244. Other bidders were: Thomas Thompson, $9100; George Sober, $9548; Frank C. Hay, $7993; Sullivan Bridge Co., $10,600 and C. C. Forum, $9862. Noted July 2 and July 16.

Fort Wayne, Ind.—(Official)—Bids wil be received until 10 a.m., Aug. 18, by Calvin H. Brown, Audr. of Allen County, for repairing and painting bridges and constructing concrete arches in the county.

Indianapolis, Ind.—Bids will be received until 10 a.m. Aug. 25 by W. T. Patten, Audr. of Marion County, for the construction of a bridge across the White River at West New York St. Noted Aug. 6.

+Ecorse, Mich.—The Ecorse Township Board has awarded the contract for the construction of a bridge over Ecorse Creek at the south end of the village to the SCHERZER ROLLING LIFT BRIDGE CO., 53 West Jackson Blvd., Chicago, at about $40,000.

De Pere, Wis.—The Common Council has instructed the City Engineer to prepare plans and estimates for the construction of a new bridge over the Fox River to replace the present structure, which has been condemned. The present bridge is 475 ft. long.

Chariton, Iowa—(Official)—All bids received on Aug. 3 by the Board of Supervisors of Lucas County for the construction of a bridge were rejected, and new bids will be received until Aug. 17 by the Supervisors for the construction of an 80-ft. pony truss, and one 40-ft. deck girder bridge. L. A. Hollingshead is County Engr. Noted July 30.

+Creston, Iowa—The Board of Supervisors of Union County has awarded the contract for the construction of 12 bridges and culverts to the MARSH ENGINEERING CO., Des Moines; the contract for three bridges and culverts was awarded to the IOWA BRIDGE CO., Des Moines. Noted June 18.

+Little Falls, Minn.—(Official)—The Commissioners of Morrison County have awarded the contract for the construction of State Bridge No. 1349 to JOHNSON & PETERSON, Little Falls, at $5190; the contract for Bridge No. 1358 was awarded to the GREAT NORTHERN BRIDGE CO., Minneapolis, at $2388. Noted July 30.

Erie, Kan.—Bids will be received until Aug. 24, by the Commissioners of Neosho County for the construction of four bridges, two 20-, one 60- and one 75-ft. span.

Mound City, Kan.—Bids will be reecived until noon, Aug. 17, by the Board of Commissioners of Linn County for the construction of reinforced concrete bridges in the county. H. L. Burnett is Chn. of the Bd. John A. Wood is Clk. of the Comrs.

Wichita, Kan.—(Official)—At an election held Aug. 4, the citizens voted in favor of a bond issue of $15,000 to be used for the construction of a concrete bridge between Central and South Riverside Parks. Bert C. Wells is City Engr. Noted July 23.

The County Commissioners of Sedgwick and Sumner Counties plan the construction of a bridge over Cowskin Creek on the county line. It will be of reinforced concrete, about 90 ft. long. J. V. Moone, Wichita, is Engr. of Sedgwick County.

Lexington, Neb.—(Official)—Bids will be received until noon, Sept. 11, by A. S. Gilland, County Clk. of Dawson County, for the construction of two bridges over the Platte River, one about 2½ miles south of Overton, Neb., and the other 3½ miles south of Lexington. Noted June 11 and July 23.

Medora, N. D.—Bids will be received until Sept. 7, by the Commissioner of Billings County for the construction of a bridge over the Little Missouri River near Medora.

Roundup, Mont.—It is reported that the Commissioners of Musselshell County will soon call a special election for the purpose of voting on a bond issue of $75,000, to be used for the construction of five steel bridges over the Musselshell River.

+Chouteau, Mont.—The Board of Commissioners of Teton County has awarded the contract for the construction of a bridge in the county to the UNITED STATES BRIDGE CO., Great Falls, Mont., at $9200.

+Dalton, Ark.—The Commissioners of Randolph County, Pocahontas, have awarded a contract for the construction of a bridge over the Eleven Point River at Dalton ,to the VINCENNES BRIDGE CO., Vincennes, Ind., at $6390.

+Dallas, Tex.—The Commissioners Court of Dallas County has awarded the contract for the construction of three bridges over the Trinity River to HESS & SKINNER, Dallas, at $25,250. Noted July 16.

McAlester, Okla.—Bids will be received until 10 a.m., Aug. 24, by J. M. Gannaway, City Clk., for the construction of a reinforced concrete bridge across Sandy Creek at Second St. J. I. Wood is Mayor.

Boise, Idaho—The lowest bid received by the Commissioners of Ada County for the construction of two steel bridges was that of the Missouri Valley Bridge & Iron Co., 1840 California St., Denver, Colo., at $4000.

+Challis, Idaho—The Commissioners of Custer County have awarded the contract for the construction of three bridges in the county to J. H. FORBES & CO., Coldwell, Idaho.

Moab, Utah—(Official)—Bids will be received until 5 p.m., Aug. 15, by the Commissioners of Grand County for the construction of a stiffened suspension bridge over the Grand River. The estimated cost is $18,600. Horace W. Sheley, 304 Dooley Bldg., Salt Lake City, Utah, is Consult. Engr.

+Salt Lake City, Utah—The State Road Commission has awarded the contract for the construction of seven State Boad bridges to J. J. BURKE & CO., Salt Lake City, at $9643. There were six bidders, whose figures ranged from the successful bid to $13,341.

Phœnix, Ariz.—The State Board of Control has approved plans for the Cañon Diablo Bridge, Coconino County, to cost about $11,000, and for bridges across the Milky and Beaver dam washes, Apache County, costing about $14,000 for the two. Lamar Cobb is State Engr. Noted Aug. 6.

McMinnville, Ore.—The Coast Bridge Co., Railway Exchange Bldg., Portland, was the lowest bidder for the construction of two steel bridges across the Yamhill River, at $13,707 for the Dayton Bridge, and $12,524 for the McMinnville Bridge. The contract has not yet been awarded. Noted July 23.

St. Helen, Ore.—(Official)—Bids will be received until 2 p.m. Aug. 15, at the Court House, St. Helen, by the State Highway Commission for the construction of four bridges on the Nehalem Highway, Columbia County. H. L. Bowlby, Portland, is State Highway Engr.

Fall River Mills, Calif.—The Board of Supervisors of Shasta County, Redding, has advertised for bids for the construction of a bridge across the Pitt River at Winters Crossing, five miles below Fall River Mills. It will be a 105-ft. span.

Needles, Calif.—Press reports state that a $75,000 bridge will soon be built across the Colorado River at Topoc, near Needles. The Federal Government has appropriated $25,000 toward its construction, San Bernardino County, Calif., and Mohave County, Ariz., will each contribute $25,000. L. V. Root, Needles, Calif., is interested.

+Pasadena, Calif.—The contract for the construction of a reinforced concrete arch, retaining walls and dam under the Colorado St. Bridge over the Arroyo Seco at Pasadena, has been awarded to the PUTNAM STONE CONSTRUCTION CO., Chamber of Commerce Bldg., Pasadena, at $38,575.

Red Bluff, Calif.—The Board of Supervisors of Tehama County has called an election for Aug. 25, to vote on the question of a bond issue of $172,000 for the construction of bridges on the State Highway through the county.

+San Jose, Calif.—The Board of Supervisors of Santa Clara County has awarded the contract for the construction of a steel bridge over Pacheco Creek to JOHN DOYLE, San Jose, at $9436. Noted July 16.

Bids will be received until 11 a.m., Aug. 17 by the Board of Supervisors of Santa Clara County for the construction of a steel bridge over the Pajaro River at the Monterey road crossing between Santa Clara and San Benito Counties. J. G. McMillan is Surv. of Santa Clara County.

Watsonville, Calif.—The Board of City Trustees has decided to build a bridge over the Pajaro River. The estimated cost is $35,000.

Quebec, Que.—The City Council is considering the construction of a steel cantilever bridge, about 150 ft. long, at Stadacona Road, Quebec. W. W. Baillarge, 50 St. Louis St., is Engr.

+Ottawa, Ont.—(Official)—The City Council has awarded the contracts for the Billings Bridge to the DOMINION BRIDGE CO., Sparks St., Ottawa, at $42,774 for furnishing the steel and erecting the superstructure, and to R. BREWDER, 317 Lyon St., Ottawa, at $22,753 for the substructure. Noted July 23.

Sudbury, Ont.—Bids will be received until Aug. 17, by W. J. Ross, Town Clk., for the construction of four bridges over certain creeks within the town of Sudbury.

Tillsonburg, Ont.—Bids for the construction of a reinforced concrete arch at Oxford St., Tillsonburg, are being received by the Engr.-in-Charge, J. A. Bell & Son, St. Thomas, Ont.

★Calgary, Alta.—(Official)—Bids will be received until 10 a.m. Aug. 26, by the City Commissioners for the construction of a reinforced concrete arch over the Elbow River in Calgary. George W. Craig is City Engr. See advertisement under Contracts To Be Let in issue of Aug. 6.

✚Vancouver, B. C.—The Municipal Council has awarded the contract for the 25th St. Bridge, West Vancouver, to NAYLOR BROS., Bank of Hamilton Bldg., Vancouver, at $33,200; the contract for the Fifth St. Bridge, West Vancouver, was awarded to BRUCE BROS., 709 Dunsmuir St., Vancouver, at $5000.

WATER SUPPLY—IRRIGATION

✚Henniker, N. H.—The contract for the construction of a reservoir, pumping station, a well and laying 12,000 ft. of water pipe has been awarded to SUSI & WILLIAMS, at $17,-009. Other bidders were: John A. Broderick, $17,490; Felix Capobianco, $17,981; Thomas Bruno, $17,714; John E. Palmer, $19,208; Light, Heat & Power Corporation, $20,375; Hanscom Construction Co., $21,659; Newell, Dresser & Cavanaugh, $24,-718; Marsano Traufaglia, $28,139; W. S. Johnson, 101 Tremont St., Boston, is Engr.

Adamsdale, Mass.—A committee consisting of F. White and A. A. Newell has been appointed by the Improvement Society to investigate a water supply for the city.

✚Boston, Mass.—(Official)—The Metropolitan Water and Sewerage Board has awarded the contract for laying 20-in. water mains in Boston, to CHARLES R. GOW CO., West Roxbury, at $5007. Bids were received July 31.

✚(Official)—Bids were received by the Metropolitan Water and Sewerage Board, July 31, for Contract 361, constructing a foundation for the steel reservoir on the summit of Bellevue Hill, West Roxbury District, from WALSH'S HOLYOKE STEAM BOILER WORKS, Holyoke, $19,397 (awarded contract); Chicago Bridge & Iron Works, $19,540; Petolem Iron Works, $19,870; Pittsburgh-Des Moines Steel Co., $20,900; Riter Conley Mfg. Co., $23,865. Noted July 30.

Mansfield, Mass.—Plans have been prepared for the construction of a reservoir on Foolish Hill. The basin will be oval, 200 ft. long and 89 ft. wide, with a depth of 16 ft.

✚Gilbertsville, N. Y.—(Official)—The contract for constructing an earth dam, a diversion channel and an 8-in. pipe line, 1¼ miles long, has been awarded by Joseph T. Gilbert to SUBURBAN ENGINEERING CO., New York, N. Y., at $23,957. Noted July 23.

Naples, N. Y.—According to press reports the citizens have voted to spend $18,000 for constructing a pipe line from the springs to the reservoir.

★Riverhead, N. Y.—(Official)—Bids will be received by the Board of Water Commissioners until 1:30 p. m., Aug. 25, for constructing a water system. Walter E. Sexton, Mineola, N. Y., is Engr. and William F. Flannigan,, Secy. of the Comn.

Jersey City, N. J.—The Board of City Commissioners has ordered the preparation of plans and specifications for the construction of new water pipe line under the Hackensack River for local service. Henry Byrne, Dir. Pub. Ser., will be in charge of the work.

✚Princeton, N. J.—The Princeton Water Co. has awarded a contract for the erection of a new tower tank with capacity of 535,000 gals., to TIPPETT & WOOD, Phillipsburg, N. J.; MATTHEWS CONSTRUCTION CO., Princeton, has received the contract for a concrete pedestal foundation for the tank.

College Hill, Penn.—(Beaver Falls post office)—The Citizens Water Co. has purchased a site in White Township for the construction of a storage reservoir.

Ebensburg, Penn.—All bids recently received by the Council for the construction of a new reservoir in connection with the water system have been rejected. The work will be done by the Borough.

McDonald, Penn.—Bids will be received by E. S. McWreath, Secy. Citizens Water Co., until noon, Aug. 15, for constructing a storage dam, filter foundations and filter building, in Robinson Township, Washington County. Douglass & McKnight, 1709 Union Bank Bldg., Pittsburgh, are the Engrs.

Reading, Penn.—Press reports state that about 3500 ft. of 30-in. pipe will be laid in 13th St. north to the city line.

✚Shippensburg, Penn.—(Official)—Bids have been received for furnishing 20,000 ft. of 10-in. iron and wood water mains as follows: W. C. FRITZ CO., Essex Bldg., Newark, N. J., at $23,900 (awarded contract); Charles Dugan, $31,500; J. I. Dick, $32,875; W. H. Angle, $29,338; and Whiting-Turner Construction Co., $32,700. John E. Coffey is Boro. Clk. Noted May 14.

Wilmington, Del.—According to press reports the city contemplates the construction of a reservoir on the Weldin Farm, to have a capacity of 32,000,000-gal. and to cost $200,000.

Pollock, Md.—At a recent election bonds for $45,000 were voted for the construction of a water and a sewer system.

Raleigh, N. C.—Bonds for $75,000 have been voted for the improvement of the water system.

Atlanta, Ga.—W. Z. Smith, Mgr. of the water-works, has recommended to the City Council an expenditure of $200,000 for additional filter beds.

Royston, Ga.—Press reports state that the city has been authorized to issue bonds for $100,000 for the construction of a water works, sewer system and crematory.

Bay Minette, Ala.—Bonds for the construction of a water and a sewer system were voted at a recent election. Noted July 2.

Breaux Bridge, La.—Bids will be received until Aug. 20 for $12,000 in bonds for extending the water system and electric-light plant. C. C. Rees is Mayor.

Hodgenville, Ky.—The citizens plan to construct a waterworks system at Hodgenville.

✚Cincinnati, Ohio—(Official)—Contracts for laying a 36-in. water main in Spring Grove Ave. and in Eastman Ave. and Deerfield Road have been awarded to the UNITED STATES CAST IRON PIPE & FOUNDRY CO., at $29,598 and at $112,000 respectively. Frank Krug is City Engr. Noted July 9 and 16.

Cleveland, Ohio—Bids will be received by Commissioner of Purchases and Supplies, room 513, City Hall, until noon, Aug. 19, for two air locks and medical locks for the West Side tunnel, also for the removal and re-erection of Woodland Ave. tower for the Department of Public Utilities, division of water. Charles F. Schultz, is Comr. of Water.

Dayton, Ohio—The city will issue bonds for $1,000,000 the proceeds of which will be used for the extension and improvement of the water system.

✚Fairport, Ohio—(Fairport Harbor Post Office)—The contract for furnishing 17,500 ft. of c.-i. waterpipe has been awarded to CHAPMAN & GLOVER, Lorain, at $13,477. J. C. Ward is Village Engr.

✚★Frankfort, Ohio—(Official)—The contract for the construction of a water system has been awarded to ROSSER, HARPER & STUART, Bremen, at $16,587. Other bids were Chillicothe Construction Co., $18,587; Seiverling & Fairbarn, $20,969. Bids were received July 21. Noted June 23.

Marysville, Ohio—Bids will be received by H. H. Shirer, Secy. Building Comn., until 2 p.m., Aug. 26, for constructing a well house, water softening plant, drilling wells, etc., at the Reformatory for Women at Marysville.

Maumee, Ohio—Bids will be received by Thomas N. Dowling, Village Clk. until Sept. 1, for the purchase of $56,000 in bonds for constructing a water system. Noted Aug. 6.

Sycamore, Ohio—Bids will be received by the Clerk, Board Trustees Public Affairs, until Aug. 14 for making improvements to the municipal water and light plants. George Champe, Toledo, is the Engr.

Zanesville, Ohio—Chester & Fleming, Engrs., Pittsburgh, Penn., have been retained to prepare plans for the construction of a filter estimated to cost $125,000.

✚Goodland, Ind.—The contract for the construction of a water system has been awarded to the NATIONAL CO., South Bend, Ind. Noted Dec. 11, 1913.

La Porte, Ind.—The city contemplates the construction of a new well at the Kankakee pumping station, to cost, $6000.

Michigan City, Ind.—Bids were received by the Krehbiel Engineering Co., Chicago for the construction of a water system as follows: Section A, concrete work; section B, small pumps, etc.; section C, both A and B. M. W. Holben, Chicago, $4160, Section A. Reed and Reed, Michigan City, section A, $7100; section B, $13,950; section C, $19,250. Rich and Johnson, Chicago, section A and B, $18,000. Brady & Co., Chicago, section A, $8851; section B, $15,672; section C, $24,-523. M. H. Crane Estate, Chicago, section B, $16,912. Noted June 4 and July 2.

Rochester, Ind.—(Official)—All bids received, Aug. 4, by W. C. Miller for installing a pneumatic or auto-pneumatic water system at the poor farm have been rejected. Noted July 30.

Muskegon Heights, Mich.—Bids will soon be received for the construction of a reservoir for increasing the water supply. Noted Feb. 12.

Ashton, Ill.—James H. Thompson, Engr., Chicago, is preparing plans for the construction of a water system. Bonds for this purpose have not yet been voted. Ralph J. Dean is Village Clk.

Champaign, Ill.—Bonds for the improvement of the water system have been voted.

East Peoria, Ill.—(Peoria post office)—Bids will be received until 8 p.m., Aug. 17, by George H. Walmsley, Pres. Board Village Council, care of, B. H. Neichelder, Clk. for laying c.-i. water pipe and setting hydrants and valves. Arthur Marshall Morgan, Harls Trust Bldg., Chicago is the Engr. Noted July 30.

Quincy, Ill.—According to press reports the city contemplates the installation of a pumping plant for the water system at Towhead Island, to cost approximately $70,000.

Sullivan, Ill.—Bonds for $35,000 have been voted by the citizens for the extension of the water system and for improvements to the light plant.

Villa Grove, Ill.—Bonds for $12,000 have been voted, the proceeds of which will be used for the installation of a water system.

Stoughton, Wis.—(Official)—All bids received Aug. 2 for constructing a reinforced concrete reservoir have been rejected. L. C. Currier is City Clk. Noted July 30.

★Dubuque, Iowa—(Official)—Bids were received July 29, by the Board of Water Works Trustees for constructing a reservoir to have a capacity of 7,500,000-gal., from J. J. Jobst, Peoria, Ill., $62,000; M. Hayes & Sons, Janesville, Wis., $64,-000; Mid West Construction Co., Kansas City, Mo., $66,000; J. W. Turner Improvement Co., Des Moines, Iowa, $69,750; John T. Blake, Madison, Wis., $72,000; Nash Dowdle Co., Chicago, Ill., $75,217; Wodrick & Son, Dubuque, Iowa, $75,650; Anton Zwack, Dubuque, Iowa, $84,956; Byrone & Saul, Dubuque, Iowa, $86,000; Commercial Construction Co., Kansas City, Mo., $86,000; George W. Stiles Construction Co., 1036 Rookery-Chicago, $86,538; Tibey Bros., Dubuque, Iowa, $87,-000; James Stewart & Co., Chicago, Ill., $106,790. Noted July 16.

Grand Mound, Iowa—(Official)—Plans for the reconstruction and extension of the waterworks have been prepared by Charles P. Chase, Consult. Engr., Clinton, Iowa.

Wheatland, Iowa—(Official)—Plans have been prepared by Charles P. Chase, Consult. Engr., Clinton, for reconstructing and extending the water system.

✚Alton, Kan.—(Official)—The contract for the construction of a water system has been awarded to COMMERCIAL CONSTRUCTION CO., Reliance Bldg., Kansas City, Mo., at

$24,018. Other bidders are: Lawrence Engineering and Construction Co., $24,700; T. C. Brooks & Sons, Co., $24,300; Readecker & Connor, $24,400; Alamo Engine & Supply Co., $24,350. Noted July 30.

✝Enterprise, Kan.—(Official)—The contract for laying 5500 ft. of 4-in. water mains has been awarded to CONNOR CONSTRUCTION CO., Kansas City, Kan. Ray E. Corbin is City Clk. Bids opened Aug. 5. Noted July 16.

McCune, Kan.—(Official)—Bids for sinking a 1100-ft. well and for installing a pump will soon be received. Bonds for $25,000 for the installation of a water system were voted Aug. 6. Henrici, Kent & Lowry, Kansas City, Mo., are the Engrs. Noted July 30.

✝Jamestown, N. D.—The contract for the extension of the water system has been awarded to C. H. PORRITT, Fargo, at $6000.

Butte, Mont.—The Little Missouri Land & Irrigation Co. is making preliminary arrangements for the installation of an irrigation system to irrigate about 20,600 acres in Fallon County. T. Lyons, Butte, is Secy.

Harlowton, Mont.—Bonds for $15,000 for the improvement of the water system were voted at a recent election. S. K. Campbell is Town Clk.

✝Charleston, Mo.—(Official)—Bids were opened Aug. 6 for for the construction of a water system. The contract has been awarded to MURRAY CONSTRUCTION CO., Poplar Bluff, Mo. Noted July 23.

Rockport, Mo.—At a recent election the citizens voted to spend $12,000 for extending the water works. John T. Wells is City Clk. Noted July 9.

Ashdown, Ark.—Bids will be received about Oct. 1, according to press reports, for constructing a water and a sewer system.

✝Wills Point, Tex.—The contract for constructing a storage dam near Wills Point has been awarded to W. R. PALMER, Wichita Falls.

Cañon City, Colo.—The City Council has authorized the overhauling of the municipal filtration plant.

Bovill, Idaho—Bids are being received by the City Clerk for the construction of a water system. H. S. Green, Paulsen Bldg., Spokane, Wash., is Engr. Noted July 16.

Payette, Idaho—The Council has authorized the expenditure of $12,000 for the construction of a reservoir and a pipe line.

Pocatello, Idaho—The City Council will hold an election, Aug. 25, for the purpose of voting on a $400,000 bond issue, to be used in acquiring the local waterworks system, owned by the Pocatello Water Co., or for the construction of a new plant.

✝Bingham Cañon, Utah—The contract for laying about 7000 ft. of 6-in. and 8-in. c.-i. water mains has been awarded to D. C. DUNBAR, Salt Lake City. Noted July 9.

Portland, Ore.—The Water Bureau plans to increase the supply in the Peninsula district by the construction of new mains to cost approximately $113,000. Philip H. Dater is City Engr.

Warrenton, Ore.—(Official)—The time for receiving bids for $150,000 in bonds for the construction of a gravity water system has been postponed at the bidders' request. John Evenden is Clk. Water Comn. Noted July 2.

Porterville, Calif.—The City of Porterville, the County and the various irrigation districts of the county will construct permanent protection work on the upper Tule River to protect the Porterville district against flood dangers. The estimated cost is $15,000. I. H. Althouse, Porterville, is Engr.

San Francisco, Calif.—According to press reports the city will buy the plant of the Spring Valley Water Co., at $34,500,000. The citizens will soon be asked to vote bonds for this purpose.

San Francisco, Calif.—The San Francisco Water Co. recently organized plans to furnish a water supply to a portion of San Francisco. James T. Boyd, Milo Hoadley and John H. Tuney are interested.

New Toronto, Ont.—Bids will soon be received by G. D. Scott, Clk. City Council for the erection of a pumping station in connection with the water system. James, Louden & Hertzberg, 79 Adelaide St. East Toronto, are the Engrs.

✝Prince Rupert, B. C.—(Official)—The contract for 8000 ft. of 6- and 12-in. water mains has been awarded to the MANNES-MANN TUBE CO., Montreal, Que., at $7228. Noted July 16.

Port Moody, B. C.—Bonds for $80,000 were recently voted, the proceeds of which will be used for laying a 12-in. water main from Noon's Creek to supply water to the city. Noted May 14.

SEWERS

Boston, Mass.—Bids will be received by the Board of Public Works until Aug. 14, for constructing sewers in various streets, Brighton District. L. K. Rourke is Comr. of Pub. Wks.

Boston, Mass.—Bids will be received by the Metropolitan Water and Sewerage Board until Aug. 21, for the construction of a cast-iron outfall sewer on Nut Island and in Boston Harbor. W. N. Davenport is Secy. of the Board.

Bedford Hills, N. Y.—The following bids were received by James Wood, Pres. Board of Managers, New York State Reformatory for Women, on July 24, for making additions to the sewer system and sewage disposal plant: Baillie & Johnson, Inc., New York, N. Y. (Borough of Brooklyn), $39,916; New York Sewage Disposal Co., New York, N. Y., $39,997; Watson Engineering Co., New York, N. Y., $46,500. Noted July 9.

Gloversville, N. Y.—Bids will be received by the City Clerk, until Aug. 18, for constructing various sewers. Harry J. Hammer is City Engr.

New York, N. Y.—(Borough the Bronx)—Bids will be received by Douglas Mathewson, Pres., the Borough, until Aug. 18, for constructing sewers in portions of Albany Crescent and Glovers Sts. and Westchester and Plumpton Aves.

Solvay, N. Y.—The city has voted $10,000 in bonds for sewer and drainage improvements.

Camden, N. J.—The Highway Department plans to construct sewers in portions of Sycamore and 26th Sts. A. L. Sayers is Street Comr.

Newark, N. J.—According to press reports, bids for constructing Section 14, of the Main Intercepting Sewer were rejected by the Passaic Valley Sewer Commissioners as being too high.

✝The contract for constructing part of Section 27 has been awarded to CHARLES A. HASKINS, Charleston, Mass., at $55,420. Noted July 9 and Aug. 6.

Trenton, N. J.—Bids will soon be called for by the city for constructing the proposed sewage disposal plant. The estimated cost is $1,000,000. Noted Feb. 5.

Harrisburg, Penn.—Bids will be received by W. H. Lynch, Comr. of Pub. Improvements until Aug. 15, for constructing a sewer in Second St.

✝Hazleton, Penn.—The contract for constructing a section of the sewer system in Clay, Cranberry and Webster Aves., has been awarded to ARIO RUTH, at $11,642.

✝Williamsport, Penn.—(Official)—The contract for constructing a 51-in. segment block sewer in Maynard Alley has been awarded to the CANTRELL CONSTRUCTION CO., Real Estate Trust Bldg., Philadelphia, Penn., at $12,627. Other bids were from Charles Dugan, $12,973; George W. Rockwell, $15,028; John Schrode, $18,735. For constructing a 48-in. segment block sewer in Washington St. the contract was awarded to E. C. WILLIAMS, $7987. Other bids were: Cantrell Construction Co., $8688; Charles Dugan, $8937; John Schrode, $9249; Geo. W. Rockwell, $9464; Jos. McCadden & H. Benedict, $10,104. John B. Otto is Chief Engr.

York, Penn.—(Official)—The following are the bids received by the City Council for constructing the sanitary outfall sewer and syphon: Whiting Turner Construction Co., (a) for lock joint pipe with vitrified tile invert, $111,226; (b) for brick sewers with vitrified brick invert, $120,049; (c) for segment block sewer, $109,896; (d) for lock joint pipe without tile invert, $99,085; William M. McCarthy, (a) $110,508; (b) $104,741; (c) $107,594; (d) $99,908; Bruno Pizzamenti, (a) $100,168; (b) $106,595; (c) $102,265; (d) $88,840; General Supply & Construction Co., (a) $99,824; (b) $86,305; (d) $88,224; Jones & McRoberts, (a) $85,034; (b) $95,096; (c) $74,497; (d) $74,497; H. C. Brookes Co., (a) $108,331; (b) $106,786; (c) $103,979; (d) $97,275; S. W. Chiles, (a) $101,270; (b) $92,568; (c) $95,839; (d) $90,001; G. W. Ensign & Co., (a) $118,338; (b) $105,423; (c) $108,703; (d) $105,400; Cantrell Construction Co., (a) $101,643; (b) $94,790; (c) $87,445; (d) $87,907; Ryan & Reilly, (a) $105,797; (b) $115,458; (c) $101,121; (d) $92,348; R. H. Williams & Co., (a) $131, 458; (b) $152,176; (c) $132,655; (d) $121,753; Jas. Ferry & Sons, (a) $352,08; (b) $91,116; (c) $84,858; (r) $84,216. George A. Warner is City Engr. Noted July 16.

✝York, Penn.—(Official)—The contract for constructing a sanitary outfall sewer and syphon has been awarded to the GENERAL SUPPLY & CONSTRUCTION CO., York, Pa. Noted July 16.

✝Baltimore, Md.—The Board of Awards has awarded the contract to CARROZZA BROS. & CO., 305 East Preston St., at $174,409 for the construction of sanitary lateral sewers and house connections in Dist. No. 43-B requiring 57,000 lin.ft. of vitrified pipe sewer 8 to 18 in., and 47,000 lin.ft. of vitrified pipe house connections, under contract No. 137. Noted July 23.

Hurlock, Md.—The citizens have voted to install a sewer system, and water works to cost about $45,000.

Royston, Ga.—See item under "Water Supply—Irrigation."

✝Gadsden, Ala.—The contract for the construction of about eight miles of sanitary sewers in West Gadsden has been awarded by the City Council to J. F. MORGAN & CO., Gadsden, at $14,367.

Newport, Ky.—Bids will soon be called for by the Commissioner of Public Works for repairing the Monmouth St. trunk sewer.

Paducah, Ky.—Plans are being prepared by the Aetna Engineering Bureau, Chicago, Ill., for constructing sewers in Sewer District No. 3. Bids for the work will be received about Aug. 18. Noted Mar. 26.

Canal Dover, Ohio—Bids received by the Dir. of Public Service for constructing the sewage disposal plant have been rejected. Noted July 16.

Centerburg, Ohio—Bids will be received by the Village Clk., until Aug. 14, for constructing a sewer in a portion of Main St.

Cincinnati, Ohio—(Official)—Bids received by Phillip Fosdick, Dir. of Pub. Service for constructing sewers in the ravines between Madison Road and Duck Creek Road have been rejected.

Elyria, Ohio—Bids will be received by M. M. Wilcox, Dir. Pub. Ser., until Aug. 17, for constructing a 24-in. storm water sewer.

✝Fairport (Fairport Harbor Post Office) **Ohio**—The contract for constructing 7500 ft. of 8- and 10-in. sewers has been awarded to CHAPMAN & GLOVER, Lorain, at $5401.

✝Kenmore, Ohio—The contract for constructing a sewage disposal plant has been awarded to F. G. DIEFENDORF, Erie, Penn., at $54,805.

Martins Ferry, Ohio—Bids will be received by George H. Harris, Clk., Bd. Pub. Ser., until Aug 13., for constructing sewers in West Virginia and Eighth Sts.

Middletown, Ohio—Bids will be received by the City Commission until noon Aug. 14, for constructing tile sewers in various streets. John Kunz is City Clk.

Niles, Ohio—The City Council has passed an ordinance, authorizing the purchase of a site for the construction of a sewage disposal plant.

+Toledo, Ohio—(Official)—The contract for constructing main sanitary sewer No. 7 in sub-district No. 1, has been awarded by the Commissioners of Lucas County to JACOB N. BICK, 601 Nasby, Toledo. Charles J. Sanzenbacher is County Audr. Noted July 23.

Woodfield, Ohio—Bids will be received by the Mayor until Aug. 15, for constructing about 3000 ft. of 18-in. sewers.

Greencastle, Ind.—Bids will be received by the City Clerk, until Aug. 26, for constructing a sewer in Sewer District No. 1. A. A. Lane is City Engr. Noted July 9.

Grand Rapids, Mich.—The lowest bid reecived by the Board of Public Works for constructing the sewer in Criggs St., was that of McDermott & Cooper, at $10,937.

Racine, Wis.—(Official)—Bids will be received by the City Clerk, until 10 a.m., Aug. 15, for constructing sewers in 12th St. and Washington Ave., also in Augusta, Wolf, Layard and Douglas Aves.

+Guthrie Center, Iowa—(Official)—The contract for constructing sewers has been awarded by the city to the GUTHRIE CONSTRUCTION CO., Iowa City, Iowa, at $32,241, and for constructing the sewage disposal plant to F. H. CHRISTENSEN, Guthrie Center, at $7950. S. B. Weeks is Clk.

Independence, Iowa—Bids will be received by the City Council, until Aug. 17, for constructing sanitary sewers in various streets. Rufus Brewer is City Clk.

Keota, Iowa—(Official)—The Iowa Engineering Co., Charles P. Chase, Engr., Clinton, Iowa, is preparing plans for a sewer system at Keota.

Brainerd, Minn.—(Official)—All bids received by the City Council for constructing sewers have been rejected. The work will be re-advertised. C. D. Peacock is City Engr.

+Omaha, Neb.—The contract for constructing sewers in Sewer District No. 503 has been awarded to E. P. DONAHUE CO., at $5937. Noted July 23.

+Jamestown, N. D.—The contract for extending the sewer system has been awarded to C. H. PORRITT, Fargo, at about $9000.

Lidgerwood, N. D.—Bids will be received by F. W. Mashek, City Audr., until Aug. 17, for constructing a sewer system, including a septic tank. The estimated cost is $24,000. H. G. Lykken, Grand Forks is Engr.

Billings, Mont.—Bids will be received by the City Clerk, until Aug. 18, for constructing sewers to cost about $18,000. C. E. Durland is City Engr.

+Havre, Mont.—The contract for constructing sewers on Eighth, Ninth and 10th Aves. has been awarded by the City Council to GEORGE W. KEMPER, Minot N. D., at $41,500.

Helena, Mont.—The lowest bid submitted to the City Council for constructing a sewer in Beattie St. was that of Louis Johnson, at $5666.

+Charleston, Mo.—(Official)—The contract for constructing a sewer system and sewage treatment works has been awarded to the BELL-HUDSON CONSTRUCTION CO., Poplar Bluff, Mo. Roy D. Strickland is City Clk.

Gallatin, Mo.—(Official)—The item in the issue of July 16, stating that plans for constructing a sewer system were being prepared is incorrect. The matter of installing a sewer system is only under consideration.

St. Louis, Mo.—Press reports state that bids were received for constructing Section 1 of the Mill Creek Sewer from Bruin-Colnon Construction Co., and Mason & Hanger Co., at $1,936,484, and the Carter Construction Co., at $1,399,824. Noted June 25.

Argenta, Ark.—Bids will be received by the Clerk, Sewer District No. 1, until 10 a.m., Sept. 10, for constructing about 17 miles of reinforced concrete sewers. The estimated cost is $300,000. Lund & Hill, Little Rock, Ark., are the Engrs. Noted July 23.

Ashdown, Ark.—See item under "Water Supply—Irrigation."

+Galveston, Tex.—The contract for contracting lateral sewers has been awarded by the City Commission to HUNTER & HUNTER, at $7627. Noted June 25.

+Houston Heights, Tex.—Press reports state that the contract for constructing a system of sanitary sewers has been awarded by the City Council to HAMILTON BROS., at about $115,000. Noted June 25.

+Bellingham, Wash.—The contract for constructing a trunk sewer in Eldridge and Bartlett's Addition has been awarded by the City Council to J. Ager, at $8361.

Seattle, Wash.—The following bids were received by Board of Public Works for constructing a sewer in 42d Ave., S.W.: L. Coluccio, $23,958; C. Cristoforo, $22,706; John Allemandi, $22,384; George W. Walker, $28,241; W. G. Jones, $26,722; H. Young, $27,008; Dahlstrom & Rodal, $14,143; A. M. Fiorito, $26,642.

Seattle, Wash.—The City Council has decided to construct sewers in Lakeside Ave. at an estimated cost of about $30,000, also to improve South 38th Ave. by constructing watermains at an estimated cost of $18,700.

+The contract for constructing sewers in Third Ave. W., in the siphon tunnel of the North Trunk sewer, has been awarded to L. R. ELLIS, Central Bldg., at $13,362. Noted Aug. 6.

Astoria, Ore.—Bids will be received by the City Council until Aug. 15, for constructing about 24,000 ft. of 8- to 30-in. pipe sewers. The estimated cost is $50,000. L. C. Rogers is City Engr.

Dallas, Ore.—Bids will be received by the City Clerk until Aug. 17, for constructing a sewage treatment plant and intercepting sewer, estimated to cost $10,000. S. B. Taylor is City Engr.

Enterprise, Ore.—Bids will be received by W. F. Savage, City Recorder, until Aug. 25, for constructing a sewer system from plans prepared by C. H. Green Consult. Engr., Paulsen Bldg., Spokane, Wash. Noted July 23.

+McMinnville, Ore.—The contract for sewer construction has been awarded to V. R. DENNIS, Spalding Bldg., Portland, at $8252. Vitrified pipe will be used.

Etna, Calif.—The citizens have voted $21,000 in bonds for constructing a sewer system and disposal plant. E. W. Bathhurst is Pres. of the Town Board. D. Baker, 310 Sansome St. San Francisco, is Engr.

Long Beach, Calif.—The lowest bid received by the Board of Public Works for installing the proposed sewer system was that of the Arthur S. Bent Construction Co., Central Bldg., Los Angeles, at $277,193. Noted July 9.

+San Francisco, Calif.—The contract for constructing the Baker's Beach outlet sewer has been awarded to R. C. STONE at about $23,000.

Visalia, Calif.—The City contemplates an expenditure of $83,000 for constructing a sewer system, including a septic tank.

Brampton, Ont.—William M. Treadgold, Brampton, is preparing plans for sewers, estimated to cost $25,000. Bids for the work will soon be called.

Toronto, Ont.—Bids will be received by H. C. Hocken, Mayor, until noon, Aug. 18, for constructing sewers in ten streets.

+Regina, Sask.—Contracts for constructing storm and sanitary sewers have been awarded by the City Council to E. G. McVEAN at $26,356 and R. J. LECKY CO., at $50,068.

+Vancouver, B. C.—The following bids have been submitted to the Joint Sewerage Commission, Birkes Bldg., for construction of the Central Park extension to China Park Sewer: HODGSON, KING & McPHALEN, $309,052 (awarded contract); H. P. Peterson, $332,772; R. McLean & Co., $333,646; Moore & Pethrick, $340,100; Union Construction Co., $348, 546; Ledingham & Cooper, $376,789; John Gault & Co., $396,396. Noted July 9.

Vernon, B. C.—The city plans to make extensions to its sewer system, to include the construction of a disposal plant. The cost is estimated at $100,000.

GARBAGE

Royston, Ga.—See item under "Water Supply-Irrigation."

Biloxi, Miss.—The city is considering the construction of a garbage incinerator.

Coffeyville, Kan.—The citizens have voted in favor of constructing a garbage incinerator, to cost $4000.

Toronto, Ont.—The plan for garbage disposal was acted upon unfavorably by the Council, July 30.

STREETS AND ROADS

+Boston, Mass.—The contract for bitulithic pavement in Clarendon St. was awarded to WARREN BROS. CO., at $15,150. Other bids were: Warren Bros. Co. (asphalt), $15,258; John F. Beatty (bitulithic), $15,262; James Doherty, $15,346 (asphalt), $15,287 (bitulithic); William J. Rafferty, $15,972, $15,972; Independent Coal Paving Co., $14,077; Central Construction Co., $14,892. Noted July 16.

Bids will be received until Aug. 18, by the State Highway Commission, for the construction of 4100 lin.ft. of road in Taunton. Arthur W. Dean, 15 Ashburton Pl., is Chief Engr.

+The contract has been awarded by the State Highway Commission for constructing 3200 lin.ft. of road in Saugus to FRAMINGHAM CONSTRUCTION CO., at $10,011. Other bids were: J. N. Gaffey, Medford, $10,107; D. J. Sheehan, Lynn, $10,110; J. E. Watkins, Amesbury, $10,136; Rowe Contracting Co., $10,311; M. H. McDonough, Swampscott, $10,313; J. B. Sweeney, Everett, $10,579; F. E. Ellis, Melrose, $13,223. Noted July 16.

+Contracts have been awarded by the State Highway Commission for 7300 lin.ft. of road in Buckland and 9400 lin.ft. of road in Shelburne to the LANE CONSTRUCTION CO., Meriden, Conn., at $5646 and $6290, respectively; 2400 lin.ft. of road in Northbridge to the HASSAM PAVING CO. Noted July 30.

Cambridge, Mass.—See item under Bridges.

+Greenwich, Conn.—Contracts have been awarded for paving North St. to W. J. MERTZ, Portchester, N. Y.; Hill Road to the PIERSON ENGINEERING CO., 868 Main St., Hartford, Conn. Noted July 16.

+Albany, N. Y.—Contracts have been awarded for improving North Pearl St., to JOHN W. DAVITT, at $17,295; Wilkins Ave., to KENNY & DUMARY, at $9080; Federal St., to ROBERT W. GLEASON, at $44,103.

+Rome, N. Y.—The contract for paving Spring St. with bitulithic has been awarded to WARREN BROS. CO., Boston, Mass., at $5532.

White Plains, N. Y.—(Official)—Bids will be received by George T. Burling, Treas. of Westchester County, until 10 a.m., Aug. 20, for the sale of $13,580 of highway bonds.

Bloomfield, N. J.—(Official)—Bids will be received by R. F. Davis, Town Clk. until 8 p.m. Aug. 17, for improving Section A and B.

Jersey City, N. J.—The Board of Commissioners will soon receive bids for the improvement of Boyd Ave., Golden and Fleet Sts. Michael L. Fagan is City Clk.

Millburn, N. J.—The Board of Chosen Freeholders plans the paving of Millburn Ave. with concrete, at an estimated cost of $17,000.

+Newark, N. J.—The Board of Works has awarded contracts to the STANDARD BITULITHIC CO. for paving Scheerer Ave., between Bergen St. and Osborne Terrace, at $13,927, and for Alexander St., between Lindsley Ave. and Bloemecke Alley, at $9705.

State Road Commissioners have rejected the bids recently received by the Board of Chosen Freeholders for paving Pompton Turnpike from Bloomfield Ave. to the Passaic County line, and canceled the contract awarded for the work to the Standard Bitulithic Co. at a cost of $93,806. New bids will soon be called for. Noted June 25 and July 23.

Perth Amboy, N. J.—The City Council will receive bids until Aug. 17 for constructing an asphalt block pavement on Amboy Ave., from New Brunswick Ave. to St. Mary's Cemetery. George M. Adair is Street Comr.

Plainfield, N. J.—(Official)—The following bids were received by Andrew J. Gavett, Street Comr., Aug. 3, for macadamizing, Emerson, Gerard, Monroe and Berkley Aves. and West Fourth St.: Burke & Bonham, $5722; Weldon Contracting Co., Rahway, $5960; Charles Lentz, Rahway, $5946 and Mobus, Sabocher & Co., $6607. Noted July 30.

Trenton, N. J.—The Board of City Commissioners has adopted an ordinance providing for the macadamizing of Cleveland Ave., between Hamilton and Greenwood Ave.

✚Contracts have been awarded for paving Boudinot, General Greene Ave., Anderson St. and Hancock St. to the NEWTON PAVING CO., at an estimated cost of $7288, $3150, $12,675 and $1760 respectively.

✚**Glen Lyon, Penn.**—A contract for paving has been awarded to CARADOC REES at $62,500.

Pittsburgh, Penn.—(Official)—Bids will be received by the City Controller until 10 a.m., Aug. 14, for concrete sidewalks and foundations for roadway pavements on the Bloomfield Bridge and its approaches. J. G. Armstrong is Mayor. Robert Swan is Dir. Pub. Wks.

Belair, Md.—Bids will be received by W. A. Wheeler, Clk. of the County Comrs., until noon Aug. 24, for constructing about three miles of the Hughes Mill Road.

Cumberland, Md.—Bids will be received by J. P. Gaffney, City Engr. until Aug. 18 for grading, curbing and paving 34th street.

★**Washington, D. C.**—(Official)—Bids will be received by the Secretary of the Board of Commissioners until 2 p.m, Aug. 18, for paving various streets and avenues in the District of Columbia, with sheet asphalt and asphaltic concrete and asphalt-block. O. P. Newman, F. L. Siddons and Chester Harding are Coms. of the District of Columbia.

Gate City, Va.—Bids will be received by the Scott County Commissioners until Aug. 18 for constructing 36 miles of road in Eastville District. G. P. Coleman is State Highway Comr.

✚**Richmond, Va.**—The contract for paving Porter St. with concrete has been awarded to the ATLANTIC BITULITHIC CO., at approximately $8690.

✚**Elizabeth City, N. C.**—The contract for paving Main St. has been awarded to GEORGE W. SWITZER & SONS at approximately $10,000.

Clarksville, Tenn.—(Official)—The following bids were received by the Commissioners of Montgomery County for constructing the Post Road in Montgomery County. Freeman & Robbins, Springfield, Tenn., $39,860; A. A. Smith, Mt. Pleasant, Tenn., $34,428; Peebles & McKitrick, Nashville, Tenn., $43,891; Vaughn & Redd, Triune, Tenn., $40,460; Capitol City Construction Co., Nashville, $36,439. Ernest S. Alderman is U. S. Highway Engr.

★**Houston, Miss.**—(Official)—Bids will be received by the Road Commissioners of the Fourth District of Chickasaw County until noon, Aug. 18, for constructing approximately nine miles of graded and graveled roads. H. E. Brannon, Houston, Miss., is Chancery Clk.

Lexington, Ky.—Bids will be received by the City Council until Aug. 17, for constructing about four miles of streets. The approximate cost is $200,000.

Akron, Ohio—Bids will be received by the Board of Commissioners of Summit County until 11 a.m., Aug. 31, for the sale of $10,307 in bonds for the improvement of the Manchester and Norton Centre Roads.

Bellefontaine, Ohio—(Official)—Bids will be received by the Board of Commissioners until 1 p.m., Aug. 18, for improving Section No. 3 of the North Ridge Road in Sheffield Township and Section No. 2 of the North Ridge and Case Roads in Avon Township. F. L. Ellenberger is Clk. of the Comn.

Chicago Junction, Ohio—Bids will be received by E. K. McMorris, Village Clk. until Aug. 22, for paving Spring St. with brick.

Cincinnati, Ohio—The City Council has passed an ordinance providing for the improving of Plum St. at an estimated cost of $6500.

Cincinnati, Ohio—(Official)—Bids will be received by the Board of County Commissioners until noon, Sept. 4, for the improvement of a section of the Brotherton Road. Albert Reinhardt is Clk. of the Comrs.

✚**Cleveland, Ohio**—The contract for grading and paving Euclid Ave. and East 55th St., under the Pennsylvania Railroad crossing, has been awarded to RIELEY BROS., at $11,000.

Cleveland, Ohio—Bids will be received by E. G. Krause, Clk. of the County Comrs., until 10 a.m. Aug. 26, for the sale of $29,203 in highway bonds for the improvement of the Berea-Triskett and Cook Roads.

Cleveland, Ohio—(Official)—Bids will be received by the Board of Commissioners of Cuyahoga County until 10 a.m., Aug. 15, for the improvement of the Solon and Richmond Road from Warrensville Center Road easterly to Miles Ave. No. 3, in Bedford Township.

Columbus, Ohio—(Official)—Bids will be received by the State Highway Commissioner until 2 p.m., Aug. 18, for constructing 13 roads at an approximate cost of $333,694. James R. Marker is Comr.

Columbus, Ohio—(Official)—Bids will be received by Samuel A. Kinnear, Dir. Pub. Ser., until noon, Aug. 18, for improving Buckingham St. from Neilton St. to Cleveland Ave., Reynolds Ave., from Cleveland Ave. to St. Clair Ave., Seventh St., from Hanford St. to Jenkins Ave., Starr Ave. and Third Ave., from Cleveland Ave. to St. Clair Ave., also the alley north of Bryden Road and for constructing a concrete sidewalk on West Broad St. opposite Glenwood Park.

Jefferson, Ohio—(Official)—Bids will be received by the Board of County Commissioners until 1 p.m., Aug. 17, for the sale of $20,500 in bonds for the improvement of the Austinburg Improvement Road No. 1.

✚**Kenton, Ohio**—The contract for paving South Main St. has been awarded to the H. O. STREICHNER CO., Toledo.

Lima, Ohio—(Official)—Bids will be received by the Director of Public Service until noon, Aug. 15, for grading, draining, curbing and paving the central part of McDonnel St., from McKibben St. to Grand Ave.

✚**Lima, Ohio**—The contract for paving Metcalf and Spring Sts. has been awarded to SUMMERS & HARDIN at $8[illegible]9 and $7200, respectively.

McConnelsville, Ohio—(Official)—Bids will be received by the Village Council until noon Sept. 2, for improving the Barnesville Road. C. C. Morgan is Clk. of the Council.

Oak Harbor, Ohio—Bids will be received by L. L. Carstensen, Village Clk., until Sept. 4, for paving Locust St.

Springfield, Ohio—(Official)—Bids will be received by Charles E. Ashburner, City Mgr., until noon, Aug. 14, for the improvement of Madison Ave., from Woodlawn Ave. to Sycamore St.

West Park, Ohio—(Official)—Bids will be received by Fred Feuchter, Village Clk., until noon Aug. 22, for improving the following streets: Trisket Road, Leland Ave., Lakota St., Vernon Ave. and Davisville Road.

✚**Worthington, Ohio**—The contract for paving Main St. has been awarded to B. F. PATTERSON & CO., Columbus, at $35,000.

Zanesville, Ohio—(Official)—Bids will be received by the Director of Public Service until noon, Aug. 17, for the improvement of Convers Ave., from Maple to Sunset Ave.

Indiana—(Official)—Bids will be received as follows for the sale of road bonds in Indiana: Brazil, until 10.30 a.m., Aug. 17, by McLean Johnson, Treas. of Clay County, for $4900 and $16,800. Huntington, until 10 a.m., Aug. 18, by G. W. Gill, Treas. of Huntington County for $19,000 in bonds. Lawrenceburg, until 10 a.m., Aug. 17, by Andrew Burke, Treas. of Dearborn County, for $23,000 in bonds for gravel roads. South Bend, until 11 a.m., Aug. 25, by F. W. Martin, Treas. of St. Joseph County, for $35,000 and $18,000.

✚**Boonville, Ind.**—(Official)—The contract for constructing a rock road in Campbell Township has been awarded to W. MARTIN, Evansville, Ind., at $13,100. Noted July 16.

✚**Brookville, Ind.**—The contract for building the Shebler Road, Franklin County, has been awarded to PUTMANN & CARR, at $9960.

✚**Gary, Ind.**—Contracts have been awarded for paving 25th Ave., from Broadway to Grant St., to HENNING & MacDERMETT, at $20,037, and 25th Ave., from Broadway to Prospect St., to M. D. HEINY, at $24,765. Noted July 23.

Goshen, Ind.—(Official)—Bids will be received by the Commissioners of Elkhart County until 2 p.m., Aug. 29, for the construction of a gravel road in Concord Township. John W. Brown is Audr.

✚**Greensburg, Ind.**—(Official)—The contract for constructing a stone road in Washington and Clinton Townships has been awarded to the CRAIG CONSTRUCTION CO., at $7449.

Indianapolis, Ind.—(Official)—Bids will be received by the Board of Public Works until 10 a.m. Sept. 2, for improving the following streets: Washington and McCarty Sts., Broadway and Keystone Ave.

Indianapolis, Ind.—(Official)—Bids will be received by the Board of Public Works, until 10 a.m., Aug. 14, for the improvement of 18th St., from Montcalm St. to Gent Ave., and Oriental St., from Washington St. to P. R. R. tracks.

✚**Kentland, Ind.**—(Official)—The contract for constructing a stone road in Beaver Township has been awarded to ALVA E. HERRIMAN, Kentland, Ind., at $9470. Noted July 16.

Muncie, Ind.—Bids will be received by John R. Kelly, City Clk., until 10 a.m., Aug. 15, for constructing concrete sidewalks on Ebright St.

✚**Noblesville, Ind.**—(Official)—The contract for paving Conner St. has been awarded to T. E. RAMSEY, at $7064.

Vernon, Ind.—(Official)—Bids will be received by the Commissioner of Jennings County until 11 a.m., Sept. 7, for the construction of a road in Lovett Township. G. J. Bernhardt is Audr.

✚**Moline, Ill.**—The contract for paving 18th Ave. from 16th to 27th St. has been awarded to the WESTERN IMPROVEMENT CO., Racine, Wis., at $21,721.

Rock Island, Ill.—The Public Improvement Board has passed an ordinance to pave 40th St. from Fifth to Seventh Ave.

✚**Eau Claire, Wis.**—(Official)—The contract for laying about 3700 sq.yd. of brick pavement on concrete base on Grand Ave. East, has been awarded to the CAST STONE CONSTRUCTION CO., at $7781. Other bids were: Andrew Larson, $9310; Thomas Woolly, $7867. Noted July 30.

✚**Superior, Wis.**—The contract for paving Tower Ave. with asphalt has been awarded to FIELDING & SHEPLEY, St. Paul, Minn.

✚**Grinnell, Iowa**—A contract for seven miles of paving has been awarded to the IOWA ENGINEERING CO., Clinton, Iowa.

Anoka, Minn.—B'ds will be received by the Board of County Commissioners until 2 p.m., Aug. 25, for road work.

Yankton, S. D.—Bids will be received by the City Auditor until Aug. 21, for paving portions of Third, Cedar, and Walnut Sts., Broadway and Douglas Ave. The work consists of 23,621 sq.yd. of pavement.

✚**White Sulphur Springs, Mont.**—A. G. PETERS, at $6963, received the contract for constructing concrete sidewalks on Main St.

✚**Trinity, Tex.**—The contract for constructing about 33 miles of sand clay roads in Road District No. 2, Trinity County has been awarded to SMITH BROS., Crockett at $76,000. Noted July 23.

Paris, Idaho—An election will be held Sept. 1 to vote on the proposition of issuing $50,000 in bonds for the construction of 48 miles of roads.

✚**Conconully, Wash.**—A contract for constructing local improvement road No. 4 has been awarded to W. E. REEVES, Twisp, at $5163.

✚**Seattle, Wash.**—The contract for paving East Pike St. has been awarded to J. J. CASHIN, at $21,796.

+Seattle, Wash.—The contract for improving 27th Ave. N. E. has been awarded to SLOANE BROS. at $11,914.

+Independence, Ore.—VANCOUVER CONTRACTING CO., Vancouver, Wash., at $10,000, received the contract for hard surface paving on C. Street.

+Oregon City, Ore.—The Clackamas County Court has awarded a contract for the construction of one and a quarter miles of oil-burned macadam road from Clackamas station; to W. H. COUNSELL, Milwaukee, Ore., at $9000.

+Portland, Ore.—The contract for paving East Clay St. with asphaltic concrete on stone base has been awarded to the INDEPENDENT PAVING CO., at $37,319.

Sutherlin, Ore.—Bids will be received until Aug. 18, for the grading and paving of Central Ave. L. G. Hicks, Roseburg, is Engr. in Charge.

+Azusa, Calif.—The contract for improving Tenth Ave. has been awarded to E. A. SIMMONS, at $8103.

+Los Angeles, Calif.—The contract for improving Hillcrest Road, from Franklin Ave. to Virginia Terrace, has been awarded to D. D. CHAPMAN, at $6632.

+Newport Beach, Calif.—A contract for improving a number of streets has been awarded to E. M. CHALMERS, 819 East Seventh St., Wilmington, at $8146.

Sacramento, Calif.—(Official)—Bids will be received by the State Highway Commission, 515 Forum Bldg. until 11 a.m., Aug. 31, for the following road construction: Colusa County, from Berlin to Colusa Junction; Yuba County, from the southerly boundary of Yuba County to Morrison's Crossing; San Luis, Obispo County from Atascadero Creek to Paso Robles; Kern County from the southerly boundary of Kern County to a point about 2.3 miles south of Rose Station; Orange County from Orvine to Santa Ana; Sacramento County from Episom to the easterly boundary of Sacramento County; Solano County from Vacaville to Batavia; Santa Barbara County from Divide to Orcutt; Santa Barbara County from Stony Creek to El Captain Creek; Los Angeles County from Castaic School to Section No. 17.

+Santa Monica, Calif.—A contract for various street improvements has been awarded to DAVID JOY, Sawtelle, Calif., at $9000.

+Willows, Calif.—The City Trustees have awarded a contract for paving Tehama St. to CLARK & HENERY, Sacramento, Calif., at approximately $18,000.

★Halifax, N. S.—(Official)—Bids will be received by the Mayor until noon, Aug. 19, for the construction of granite block and sheet asphalt or bitulithic pavement. J. J. Hopewell is Clk. of the Bd. of Wks.

+Peterboro, Ont.—The contract for asphaltic concrete paving on concrete base has been awarded to FOLEY & GLEESON, Central Chambers, Ottawa, at $82,137.

Edmonton, Alta.—Plans are being prepared for the erection of a municipal paving plant at an estimated cost of $37,000. Bryce J. Saunders is in charge of the work.

+Edmonton, Alta.—Contracts have been awarded for paving 10,000 sq.yd. to the NATIONAL PAVING CO. and 11,000 sq.yd. to the CROWN PAVING CO.

INDUSTRIAL WORKS

Cambridge, Mass.—The Penn Metal Co. has purchased a site at Binney and Monroe Sts., Cambridge, and will erect a reinforced concrete manufacturing plant. Monks & Johnson are the Arch. G. A. Sagendorph is the Pres.

East Boston, Mass.—The United States Oxygen Co., has purchased a site on Orleans St., and plans to erect a 60x160-ft. reinforced-concrete factory. James Carlton is the Pres.

Franklin, Mass.—The Massachusetts Waste Co., has purchased a site and plans to erect a plant for the cleaning of cotton waste. The estimated cost is $75,000.

Milford, Mass.—The George Dodds Granite Co., Xenia, Ohio, plans to erect a factory in Milford.

North Adams, Mass.—Local press reports state that the Hoosac Cotton Mills plan to spend $1,000,000, in new buildings and machinery.

+Springfield, Mass.—The Chapin Realty Trust Co., 499 Main St., has awarded a contract to FRED T. LEY & CO., for the erection of a three-story, 71x168-ft., reinforced concrete and brick garage. The estimated cost is $50,000. H. L. Sprague is the Arch. Noted July 23.

+Webster, Mass.—The S. Slater & Sons Co., has awarded the contract for erecting a four-story, 78x92-ft. addition to its mill, to the TORRINGTON BUILDING CO., Torrington, Conn., at $35,000. Charles T. Main, 201 Devonshire St., Boston, is the Arch. Noted Dec. 11, 1913.

+Worcester, Mass.—The George E. Duffy Co., Cherry Valley District, has awarded a contract to E. D. WARD, 82 Foster St., for the erection of a five-story, 40x80-ft., brick factory.

Bridgeport, Conn.—Albin E. Henkel, manufacturer of laces, has had plans completed for a three-story, 80x200-ft. reinforced concrete factory. Samuel M. Green Co., Springfield Mass., is preparing the plans.

New Haven, Conn.—C. Cowels & Co., Water St., plans to erect a four-story, 42x79-ft. reinforced concrete addition to its factory. The estimated cost is $29,000. L. W. Robinson is the Arch.

+New York, N. Y.—(Borough of Brooklyn)—The Gretsch Mfg. Co., Brooklyn, has awarded a contract to the TURNER CONSTRUCTION CO., for building a seven-story, 73x143-ft. warehouse at Berry and South Fifth Sts. William Higgenson is the Arch.

+Niagara Falls, N. Y.—The International Acheson Graphite Co., has awarded a contract to THE TURNER CONSTRUCTION CO., Buffalo, for erecting a three-story addition to its plant at Buffalo Ave., and Portage St. The estimated cost is $35,000.

+Niagara Falls, N. Y.—The American Chain Co., Bridgeport, Conn., has awarded a contract for the construction of a 159x440-ft. reinforced concrete factory, to SAMUEL AUSTIN CO., Cleveland, Ohio. The plant will be used for the manufacture of Weed tire chains for the Canadian trade.

Arlington, N. J.—The Arlington Co., manufacturers of celluloid specialties, has acquired property adjoining its plant on Schuyler Ave., to provide space for an addition.

+Newark, N. J.—J. S. Mundy, manufacturer of gasoline engines and hoisting machinery, has awarded the contract for a new plant to be erected in Frelinghuyson St., to the DAVID HENRY BUILDING CO. The estimated cost is $41,000. Noted May 28.

Harrisburg, Penn.—Charles Bernheisel, Arch., Tristee Bldg., is preparing plans for a three-story, 92x185-ft. brick cigar factory for the Dauphin Cigar Co.

Lebanon, Penn.—The Valley Mould & Iron Co., has commissioned T. F. Edwards, Lebanon, to prepare plans for a group of the buildings which will be constructed in connection with its ingot mould plant. The estimated cost is $200,000. Noted July 30.

+Manayunk, Penn.—The Martin and William H. Nixon Co., paper manufacturer, has awarded a contract to BAR-CLAY-WHITE & CO., 1530 Chestnut St., Philadelphia, for the erection of its factory. The estimated cost is $65,000. Noted June 25.

Morganza, Penn.—Bids will be received by Supt. W. F. Penn., Pennsylvania Training School, Morganza, Penn., until 10 a.m., Aug. 17, for alterations and additions to its bakery building. T. E. Billquist, 3234 Fourth Ave., Pittsburgh, Penn., is the Arch.

+Philadelphia, Penn.—The contract for the construction of a four-story, 71x159-ft. factory on Tacony St., for the Quaker City Rubber Co., Philadelphia, Penn., has been awarded to the TURNER CONSTRUCTION CO. Ballinger & Perrot are the Archs. Noted July 9.

+John T. Lewis & Bros. Co., has awarded a contract to the UNIT CONSTRUCTION CO., for erecting a 66x128-ft. machine shop on Armingo Ave. The estimated cost is $30,000.

+Pittsburgh, Penn.—The Pittsburgh Foundry & Machine Co., 31st and Liberty St., has awarded a contract to the McCLINTIC, MARSHALL CO., for the construction of a 50x160-ft. foundry at 36th St., and the Baltimore & Ohio R.R.

+The Gem Mfg. Co., has awarded a contract to W. N. KRATZER & CO., Pittsburgh, for the construction of a 132x137-ft. factory on the North Side.

+Wilkes-Barre, Penn.—WILLIAM J. SMITH, 293 South Main St., was awarded a contract for erecting a three-story, 70x80-ft. warehouse, for the Wilkes-Barre Gas & Light Co.

+York, Penn.—The York Corrugation Co. has awarded a contract to SAMUEL GLATFELTER, York, for the erection of a 40x176-ft. warehouse addition. The estimated cost is $30,000.

+Wilmington, Del.—The Huber Baking Co. has awarded a contract to ELWOOD SHARPE, 1244 Elm St., Wilmington, for the erection of a 100x160-ft. brick bakery at Ninth and Union St. Philip Isaac, 1317 West St., Wilmington, is the Arch.

Baltimore, Md.—The Dix Mfg. Co. has purchased a site and will erect a 120x126-ft. factory and warehouse at Eager and Conrad Sts., to cost $125,000. Noted Mar. 26.

Belhaven, N. C.—The Peoples Gin Co., recently incorporated with $100,000, plans to establish a cotton gin.

Wilson, N. C.—Hackney Bros. have plans prepared for the erection of a buggy manufacturing plant of five sections, each 100x140 ft., to cost $50,000.

Barnesville, S. C.—The Big Salkehatchee Cypress Co. will erect a single-band mill with a daily capacity of 80,000 ft.

Charlestown, S. C.—The Southern Ry. Co. has purchased a tract of land on Cooper River, and is having plans prepared for the construction of a coal terminal.

Atlanta, Ga.—The Exposition Cotton Mills will erect a three-story, 93x100-ft. addition to its plant.

Hammond, La.—F. L. Pantall plans to erect a box and veneer factory.

Morgan City, La.—Eugene Pharr, Berwick, La., plans to erect a condensed milk factory.

New Orleans, La.—The Alden Knitting Mills will erect an addition to its plant, to cost $18,000.

Nashville, Tenn.—The Cumberland Tobacco Works, recently destroyed by fire with a loss of $50,000, plans to rebuild as soon as plans are prepared. J. F. Regan is the Mgr.

Ashland, Ohio.—The Maiwurm General Aluminum Co. has had plans prepared fo rthe erection of a 40x75 ft. addition to its plant.

Cleveland, Ohio—The Cleveland Suit & Skirt Co., has completed plans for a two-story, 55x80-ft. reinforced concrete factory to be erected on East 25th St. The estimated cost is $12,000. Harry H. Cone, 1228 Schofitld Bldg., Cleveland, is the Arch.

The Willard Storage Battery Co., has completed plans for a one-story, 135x200-ft. factory to be built on East 131st St. The estimated cost is $35,000.

+The Cleveland Ry. Co., Leader News Bldg., has awarded a contract to the WILLIAM I. THOMPSON CO., 6110 Euclid Ave., Cleveland, for the construction of new car barns and shops on Superior Ave. The estimated cost is $150,000. Noted June 4.

+The Ford Motor Co., Detroit, Mich., has awarded a contract for the construction of an assembling and service plant to be erected at Euclid Ave. and East 117th St., to MORROW BROS., Baltimore, Md. Estimated cost, $50,000. John Graham is the arch.

+Cleveland, Ohio—The Star Baking Co., 3070 West 20th St., has awarded a contract to H. G. SLATMEYER, 203 Lakeside Ave., Cleveland, for the construction of a baking plant at Lakeview Ave. and Nickle Plate R. R. The estimated cost is $100,000.

Sandusky, Ohio—The Pittsburgh Plate Glass Co., has acquired control of the Enterprise Glass Co., of this city and will make a number of improvements to the buildings and equipment.

Toledo, Ohio—The Roberts-Toledo Auto Co., will erect a three-story, 100x100-ft. reinforced-concrete repair shop at Adams and 13th Sts.

Youngstown, Ohio—The Freedom Oil Co., is having plans prepared for a 100x140-ft. reinforced concrete storage house to be erected on Woodland Ave.

Youngstown, Ohio—Plans have been completed by the Concrete Steel Co. for a 100x200-ft. reinforced concrete addition to its plant. John Hart is the Mgr.

New Albany, Ind.—The Monon Ry., Chicago, Ill., plans to build a reinforced concrete coal handling plant at an estimated cost of $50,000.

Chicago, Ill.—J. E. Monhon, 6822 Loomis St., will build a two-story brick dairy to cost $13,000. B. W. Crow is the Arch.

Chicago, Ill.—The American Pattern & Model Co., 8057 Walnut St., will erect a two-story brick factory, to cost $14,000. Davidson & Lockwood are the Archs.

✚Cedar Falls, Iowa—The Iowa Gate Co. has awarded the contract for constructing its factory to G. L. SMITH, Waterloo, Iowa. The estimated cost is $50,000.

✚St. Louis, Mo.—The Bradbury Marble Co., 4165 Duncan St., has awarded the contract to the CHAPLINE CONSTRUCTION CO., for the erection of a two-story factory, to cost $10,000.

Sand Springs, Okla.—The Sand Springs Mfg. Co., recently organized with $75,000 capital, will erect a plant for the manufacture of engines.

✚Ogden, Utah—The Utah Construction Co., has awarded the contract for furnishing the structural steel to be used in the construction of its $50,000, machine shop, to JAMES BURKE & CO., Salt Lake City.

✚Tacoma, Wash.—The Oregon-Washington Ry. & Navigation Co. has awarded a contract for the erection of a freight building at Tacoma, to O. F. LARSON, Tacoma, at $50,000.

Seattle, Wash.—L. Inch, New York Bldg., will erect a commercial garage and machine shop at 2126 Third Ave., estimated to cost $14,000. J. L. McCauley, Mehlhorn Bldg., Seattle, is Arch.

Warrenton, Ore.—The Lighthouse Packing Co., will enlarge its clam cannery at a cost of about $10,000. H. A. Sprague is Pres.

Los Angeles, Calif.—The Pacific Reduction Co., will erect a 35x118-ft. reinforced concrete plant at 2654 Lenard St. The estimated cost is $10,000. Henry E. Bean is the Engr.

✚MULDER & HARMISH 143 Rose St., have been awarded the contract for the erection of a brick laundry for the Patton State Hospital, at $17,380.

Merced, Calif.—The Associated Oil Co., will erect four tanks and a warehouse on the extension of Fifteenth St. John R. Graham is local mgr.

✚San Diego, Calif.—Nelson Snyder has awarded a contract to BROWN & DECEW, San Diego, for the construction of a 60x100-ft. brick laundry on 15th St., at $14,000.

Stockton, Calif.—The Holt Mfg. Co., manufacturer of harvesters and tractors, will erect an addition to its pattern shop and foundry to cost $20,000.

Montreal, Que.—The Garth Co., 28 Craig St., brass founders and manufacturer of plumbers' supplies, will soon ask bids for the construction of additions and alterations to its plant. H. C. Stone, 84 St. Francis Xavier St., Montreal, is Arch.

Bridgeburgh, Ont.—The Canadian Hardware Mfg. Co., recently incorporated with a capital of $100,000, has purchased a site where it is planned to erect a factory. Present offices, Tonowanda and Wall Sts., Buffalo, N. Y.

North Edmonton, Alta.—The Great Northern Tannery Co., is having plans prepared for the construction of a three-story addition to its plant. The estimated cost is $50,000.

Fort George, B. C.—Wilson & Wilson, Archs., Vancouver, B. C., have completed plans for the erection of a three-story brewery to be financed by Vancouver interests.

Penticton, B. C.—The Kettle Valley Ry. plans the erection of a fruit warehouse which is to cost $25,000. James J. Warren is Pres.

FEDERAL GOVERNMENT WORK

✚Locomotive Crane—Boston, Mass.—The contract for installing a locomotive crane at the Boston Navy Yard, has been awarded to ORTEN & STEINBRENNER, 608 South Dearborn St., Chicago, Ill., at $6649. Noted June 18.

Roofing and Siding—Newport, R. I.—Bids will be received until 11 a.m., Aug. 29, by H. R. Stanford, Ch., Bureau of Yards & Docks, Navy Dept., Washington, D. C., for corrugated siding and roofing for addition to boathouse, naval training station, Newport, R. I.

Rewiring and Fixtures—New York, N. Y.—The contract has been awarded to T. FREDERICK JACKSON, INC., New York, for rewiring and installing lighting fixtures in various buildings at Governor's Island, New York, at $12,843.

Dredging—Wilmington, Del.—Bids will be received until 11 a.m., Aug. 18, by Maj. E. N. Johnston, Corps Engrs., U. S. A., for dredging Maurice and Salem Rivers, N. J. and Little River, Del.

★Dredging—Wilmington, Del.—(Official)—Bids will be received until 11 a.m., Sept. 8, by Maj. E. N. Johnston, Corps Engrs., U. S. A., Wilmington, for dredging in Tuckerton Creek, N. J.

Sale of Material—Baltimore, Md.—Bids will be received until 2 p.m., Aug 20, by the Lighthouse Inspector, Baltimore, for the purchase of articles of no further use to the government, including scrap iron, old rope, old rubber hose, scrap copper, blocks, etc.

✚Dredging—Broad Creek, Md.—The contract for dredging in Broad Creek, has been awarded to SANFORD & BROOKS, Baltimore, Md., at $15,010. Noted July 30.

Revenue Cutters—Washington, D. C.—Bids will be received until 2 p.m., Sept. 1, by B. R. Newton, Asst. Sec. Treasury Dept., Washington, D. C., for constructing two revenue cutters to be known as Nos. 26 and 27.

✚Dredging—Rappahannock River, Va.—The contract for dredging in the Rappahannock River, has been awarded to the MARYLAND DREDGING & CONSTRUCTION CO., Baltimore, Md., at $34,000. Noted June 18.

★Dredging—Wilmington, N. C.—Bids will be received until noon, Sept. 8, by Maj. H. W. Stickle, Corps Engrs., U. S. A., Wilmington, for dredging in the waterway from Core Sound to Beaufort Harbor, N. C.

Steel Sheet Piling—Wilmington, N. C.—The lowest bid submitted to Maj. H. W. Stickle, Corps Engrs., U. S. A., Wilmington, for 1576 tons of steel sheet piling, was that of Gelsenkirchener Bergwerke, A. G., New York, at $51,98[illegible] f.o.b., Wilmington and $57,353, f.o.b., Elizabethtown, N. C.

✚Dikes—Savannah, Ga.—The contract for constructing dikes in the Savannah River, has been awarded to A. J. TWIGG & SON, Augusta, Ga., at $4472.

✚Post Office—Jennings, La.—Oscar Wenderoth Supervising Arch., Treasury Dept., Washington, D. C., has awarded the contract to the NEWPORT CONSTRUCTION & ENGINEERING CO., Newport News, Va., for constructing the post office at Jennings, at $42,000. Bids were opened July 21. List of bidders noted July 30.

✚Dredge Arm and Spare Parts—New Orleans, La.—The contract for furnishing dredge arm parts and spare parts for the U. S. dredge New Orleans, has been awarded to the GRISCOM RUSSELL CO., New York, at $12,015. Noted June 11.

✚Repairs to Wharf—New Orleans, La.—The contract for constructing a wharf at the naval station, New Orleans, has been awarded to LOUIS M. DALGREN, 315 Carondolet St., New Orleans, at $14,468. Noted July 30.

✚Towboat—New Orleans, La.—The contract for constructing and delivering the steel hull stern wheel towboat "Chalmette," has been awarded to the HOWARD SHIP YARDS CO., Jeffersonville, Ind., at $19,425 delivered at New Orleans and $18,925 at yards. Other bids were Dubuque Boat & Boiler Works, Dubuqua, Iowa, $25,575; Johnson Iron Works, New Orleans, $25,125. Noted July 16.

✚Lift Bridge—Louisville, Ky.—The contract for furnishing and constructing a direct lift bridge over the Louisville and Portland Canal at 18th St., Louisville, has been awarded to the PENN BRIDGE CO., Beaver Falls, Penn., at $39,428. Noted July 23.

✚Forgings—Cincinnati, Ohio—The contract for furnishing and delivering forgings (horses and props) for Dams Nos. 15 and 20, has been awarded to the AMERICAN BRIDGE CO., Ambridge, Penn., at $27,358.

Post Office—Gary, Ind.—Bids were received as follows, Aug. 5, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a post office at Gary, (a) limestone; (b) sandstone; (c) marble: M. Yeager & Son, Danville, Ill., (a) $93,780; (b) $91,280; (c) $118,460. Westchester Engineering Co., White Plains, N. Y., (a) $88,360; (b) $92,000; (c) $115,700. George W. Stiles Construction Co., Chicago, Ill., (a) $92,800; (c) $118,500. J. E. and A. L. Pennock, Philadelphia, Penn., (a) $103,200; (b) $108,000. Conners Bros. Co., Lowell, Mass., (a) $102,682; (b) $108,000; (c) $124,900. W. H. Fissell & Co., New York, N. Y., (a) $93,790; (c) $116,990. Pain & Stevens, Gary, Ind., (a) $109,330. Christ Kanzler & Son, Evansville, Ind., (a) $113,950; (b) $115,950; (c) $149,000. N. H. Shields, Danville, Ill., (a) $94,750; (c) $121,300. Barnes Bros., Logansport, Ind., (a) $117,000. Dieter & Wenzel Construction Co., Wichita, Kan., (a) $100,779; (b) $104,200; (c) $140,400. The building will be two stories and basement, ground area, 7190 sq.ft., stone facing, composition roof and fireproof construction. Noted June 25.

✚Post Office—Urbana, Ill.—The contract has been awarded to the CALLAHAN & MANDL CO., 980 La Salle St., Chicago, Ill., for constructing the post-office at Urbana, at $64,139.

Pipe—Huntley, Mont.—The William B. Pollock Co., Youngstown, Ohio, submitted the lowest bid to the U. S. Reclamation Service, Huntley, for riveted steel pipe, St. Mary storage dam, at $41,260.

✚Drains—Huntley, Mont.—The U. S. Reclamation Service has awarded the contract to NOWELL, ATHERLY & CAMP, Billings, Mont., and to C. E. LINDSTROM, Billings, for drains for the Huntley Irrigation Project, at $8245 and $11,168 respectively.

✚Hospital—St. Louis, Mo.—The contract for making repairs to the U. S. Marine Hospital at St. Louis, has been awarded to the DUFFNER & STECKER CONSTRUCTION CO., St. Louis, Mo., at $7800.

✚Post Office—Idaho Falls, Idaho—The contract for the construction complete of the U. S. post office at Idaho Falls, has been awarded to the SOUND CONSTRUCTION & ENGINEERING CO., Seattle, Wash., at $86,199. Noted July 16.

Generator—Phœnix, Ariz.—The lowest bid submitted to the U. S. Reclamation Service, Phoenix, for a vertical a. c. generator for the Roosevelt power plant, Salt River Project, Ariz., was that of the General Electric Co., Schnectady, N. Y., at $21,694.

Canal—(Concrete Work)—Phoenix, Ariz.—Bids will be received by the U. S. Reclamation Service, Phoenix, for concrete work aggregating 68,000 cu.qd., on the Wallace Feeder Canal, Salt River Valley Irrigation Project.

Post Office—Medford, Ore.—Bids will be received until 3 p.m., Aug. 22, by Oscar Wenderoth, Superv. Arch., Treasury Dept., Washington, D. C., for the construction of a three-story post-office and court house at Medford.

Steel Pressure Pipe—Los Angeles, Calif.—Bids will be received until 2 p.m., Aug. 21, by O. H. Ensign, Ch. Electrical Engr., Los Angeles, for furnishing riveted steel pressure pipe for the Okanogan project.

Traveling Crane—Los Angeles, Calif.—Bids were received July 20, by the Director of the U. S. Reclamation Service, Los Angeles, Calif., for a traveling crane for the Salt River Project, Ariz., as follows: Northern Engine Works, Detroit, Mich., $3790; Manning, Maxwell & Moore, San Francisco, Calif., $3956; Niles Bement Pond Co., 111 Broadway, New York, $4000; Whiting Foundry Equipment Co., Harvey, Ill., $4100; The Cleveland Crane & Engineering Co., Wickliffe, Ohio, $4300; The Exeter Machine Works, Pittston, Penn., $4920; Toledo Bridge & Crane Co., Toledo, Ohio, $6400.

Steel Castings—Philippine Islands—Bids were received July 30 by Col. S. W. Roessler, Corps Engrs., U. S. A., Army Bldg., New York, N. Y., for steel castings for the Philippine Islands The lowest bid was submitted by the Federal Steel Foundry Co, Chester, Penn., at $8995.

MISCELLANEOUS

✚Dredging—Boston, Mass.—The State Board of Harbor and Land Commissioners has awarded the contract to the BAY STATE DREDGING CO., Boston, for dredging Rockport Harbor, at $12,700. Noted July 2.

✚Subway Station—Boston, Mass.—The Boston Transit Commission, Aug. 4, opened bids for constructing the Park St. station of the subway. The contract has been awarded to COLEMAN BROS., Boston, at $62,716. Noted July 30.

Seawall—Boston, Mass.—The Metropolitan Park Commission, Aug. 4, opened bids for constructing the concrete seawall at Revere Beach. M. J. McGAWLEY, Boston submitted the lowest bid, at $21,055 and was awarded the contract.

Dock Work, Etc.—Buffalo, N. Y.—The Buffalo Creek R. R. Co. will award contracts soon for the construction of dock and shoring work, aggregating 2200 ft., along the Buffalo River, between Hamburg Turnpike and the Lake Shore & Michigan Southern Ry. bridges. S. M. Kielland, Buffalo, N. Y., is Engr.

Recreation Pier—Buffalo, N. Y.—Plans for the proposed Bird Island recreation pier are being prepared by the engineering department of the Board of Public Works. F. G. Ward is Coms.

✚Refrigeration Equipment—Comstock, N. Y.—Bids were received by John B. Riley, Supt. State Prisons, Capitol, Albany, N. Y., for installing refrigeration equipment in the mess hall and kitchen building at the Great Meadow prison, Comstock. The bids follow: Shipley Construction & Supply Co., Brooklyn, N. Y., $18,700; Cartondale Machine Co., 50 Church St., New York, $16,300. Noted July 23.

★Pavilion Seats—Ithaca, N. Y.—(Official)—Bids will be received until 3 p.m., Aug. 24, by E. L. Williams, Treas., Cornell University, Ithaca, for seats in the stock-judging pavilion at the New York State College of Agriculture, Cornell University, Ithaca.

Fire Alarm Telegraph Extension—New York, N. Y.—Bids will be received until Aug. 17, by Robert Adamson, Fire Comr., Borough of Manhattan, for constructing an extension to the fire alarm telegraph system.

✚Rapid Transit System—New York, N. Y.—New York Municipal Ry. Corporation (Brooklyn Rapid Transit Co.)—The Public Service Commission, 154 Nassau St., Borough of Manhattan, New York, N. Y., has approved a supplementary contract between the New York Municipal Ry. Corporation and GEORGE W. McNULTY, Inc., Brooklyn, for the reconstruction of the Sea Beach line. Under the contract of Oct. 6, 1913, only two tracks were to be laid and equipped for trolley operation, but under the supplementary contract, four tracks will be laid at once and be equipped with the third rail system. Under this arrangement the line will be ready for operation in connection with the Fourth Ave. Subway, between Fourth Avenue and New Utrecht Ave., on January 1, 1915, and as far as 86th St., by May 1, 1915.

The commission has been informed that the New York Municipal Ry. Corporation will receive the necessary consent to legalize the Jamaica Ave. elevated extension, and it is expected that bids for construction will be asked soon.

✚Pier, Dredging—Bayonne, N. J.—The Lehigh Valley R. R. Co. has awarded the contract to HENRY STEERS, INC., 17 Battery Place, New York, for constructing its proposed 1200-ft. pier at Constable Hook, Bayonne. The contract for the necessary dredging has been awarded to G. H. BREYMANN & CO., Boston, Mass. Noted July 30.

Piers—Bayonne, N. J.—The Standard Oil Co. will build seven piers, 500-ft. long, along the shore of the Kill von Kull at its Constable Hook, Bayonne plant.

✚Fire Station—Elizabeth, N. J.—The city has awarded contracts as follows for constructing fire station No. 5: brick masonry, to L. BELLUCIO & BRO., Elizabeth; carpentry, to C. A. CRAIG, Elizabeth; plumbing, to HOFFMAN & WACHTER, Elizabeth; and electrical work, to E. F. GUINE, Elizabeth. Estimated total cost, $20,000.

Bath-House—Newark, N. J.—The Common Council has approved plans for the erection of a bath house. James S. Pigott is Arch. George W. Knight, Engr. Bd. of Education, is Consult. Engr. Estimated cost, $120,000.

Fire Station—New Brunswick, N. J.—The city plans to construct a fire station to cost $16,000. Asher Atkinson is City Engr.

Fire Station—Union, N. J.—Bids are being received by Emil Bantz, Town Clk., Union Hill, for constructing a fire station to cost $18,000. It will be two stories, 80x25 ft.

✚Stable—Philadelphia, Penn.—Carver & Moore, 1305 Diamond St., Philadelphia, have awarded the contract to JAMES R. DRISCOLL, Hale Bldg., Philadelphia, for constructing a two-story and basement stable, 26x120 ft., at about $18,000.

Subway—Cumberland, Md.—Plans are being prepared for the construction of a wagon, street-car and passenger subway under the tracks of the Baltimore & Ohio R. R. at Green Ct., Cumberland. James P. Gaffney is City Engr.

Fire Apparatus—Wheeling, W. Va.—The city plans to purchase motor-driven fire apparatus to cost $20,000. C. B. Cooke is City Engr .

Coal Terminal—Charleston, S. C.—The Southern Ry. Co. plans to construct a coal terminal at Charleston. A site of 114 acres has been purchased. B. Herman, Washington, D. C., is Ch. Engr. M. W. and Struct.

★Dredging Bulkheads—Jacksonville, Fla.—(Official)—Bids will be received until noon, Sept. 10, by the Port Commissioners for dredging in the St. Johns River at Jacksonville for municipal dock and terminal purposes; also for interlocking steel sheet piling bulkheads for municipal dock and terminal purposes. F. W. Bruce is Egr.

✚Levee Work—New Orleans, La.—The following contracts for levee work were awarded by the State Board of Engineers, July 25: Carroll Levee, 78,000 cu.yd., to HEARIN & RYAN, at 14.98c. per cu.yd.; Roydraz Levee, 80,000 cu.yd., to GIBSON BROS., at 18.3c.; Algerra-Venice Levee, 22,000 cu.yd. earthwork and 8000 ft. of wood revetment, to SMITH BROS., at 20c. per cu.yd. for earthwork and 90c. per lin.ft. for revetment; Longwood Levee, 175,000 cu.yd., to WALKER & HILL, at 17.8c.; Mascot Levee, 170,000 cu.yd., to DONOVAN & DALY, at 19.4c.

The Orleans Levee Board July 28 awarded contracts as follows for levee work: Milliken's Bend Levee, 125,000 cu.yd., to CLARK & HARRIS, at 19.8c.; Cabin Teele Levee, 75,000 cu.yd., to LEONARD & CHESHISE, at 28c.; Duckport Levee, 125,000 cu.yd., to JOHN G. SESSIONS, at 15.42c.; Fairview Levee, 80,000 cu.yd., to CLARK & HARRIS, at 24.9c.; Paris-Line-Canal St. Ferry Levee, to the HERECULES CO. LTD., at 21.4c.; Beka New Levee, to DAMERON & WHITE, at 14c.; Canal St.-Algiers Sawmill Levee, to L. O. HOTARD, at 30c., for earthwork and 90c. per sq. yd. for concrete facing.

Drainage—Buena Vista, Tenn.—W. H. Gassiter, Buena Vista, is interested in the construction of a drainage district along the Big Sandy River.

Subway—Alliance, Ohio—Bids will be asked soon by the city for constructing the Arch Ave. subway. Wade Shindler is City Engr.

Iron Fence—Cincinnati, Ohio—Bids will be received until Aug. 25 by the Board of Hospital Commissioners for an iron fence with gate-houses at the grounds of the General Hospital. This is a readvertisement. Bids received July 14 were rejected as excessive. Samuel Hannaford & Sons, Hurlbert Block, Cincinnati, are Archs.

Fire Apparatus—Marion, Ohio—The city plans to purchase fire apparatus to cost $10,000.

Ditch—Valparaiso, Ind.—Bids are being received by the County Commissioners, Valparaiso, for constructing Calumet Ditch.

Fire Station, Etc.—Milwaukee, Wis.—Plans are being prepared for a fire station and a fire-boat station for the city. J. A. Mesiroff is City Engr.

CONTRACT PRICE

Viaduct—Wilkes-Barre, Penn.—Bids were received by the city, July 7, for constructing the Butler St. viaduct, from (A) Williams & Richardson, Scranton; (B) Bolton G. Coons Construction Co., Wilkes-Barre; (C) Whittaker & Diehl, Harrisburg; (D) D. M. Roser, Wilkes-Barre; (E) John Heller, Newark, N. J.; (F) Penn Bridge Co., Beaver Falls; (G) Neeld Construction Co., Pittsburgh; (H) McHarg Barton Co., New York, N. Y.; (I) Whiting-Turner Co., Baltimore, Md.; (J) Barzaghi Vought Co., New York, N. Y.; (K) Mason Hilton Co., New York, N. Y. The item bids were as follows:

VIADUCT, WILKES-BARRE, PENN.

	A	B	C	D	E	F	G	H	I	J	K
1400 cu.yd. excavation	$0.75	$0.70	$1.65	$0.50	$0.60	$0.50	$1.10	$0.50	$1.50	$0.70	$1.00
270 cu.yd. concrete "A"	6.80	8.00	8.80	6.50	6.00	6.50	4.93	5.00	6.20	7.00	6.00
1460 cu.yd. concrete "B"	8.80	8.00	11.00	7.50	6.90	8.00	7.56	8.00	20.00	10.00	10.00
1950 cu.yd. concrete "C"	16.00	17.00	27.50	15.00	18.50	12.50	14.47	16.00	20.00	15.00	14.00
2400 lin.ft. railings	1.95	2.50	2.00	2.00	2.50	2.50	1.40	2.00	3.50	1.50	1.50
14 lamp posts A	13.00	9.00	27.50	50.00	20.00	20.00	16.00	15.00	20.00	30.00	15.00
6 lamp posts B	13.00	13.00	22.00	60.00	20.00	15.00	21.00	20.00	25.00	40.00	12.00
13,200 sq.ft. granite finish	0.04	0.10	0.09	0.05	0.05	0.03½	0.048	0.05	0.05	0.07	0.04
3720 sq.yd. asphalt pavement	1.60	1.30	1.65	2.50	1.25	2.00	1.65	1.25	2.50	2.00	1.50
Hillside block pavement	1.60	1.35	2.50	2.00	2.00	....	1.95	1.50	2.50	3.00	1.50
2400 lin.ft. conduits, 2 in6	0.38	0.10	0.22	0.15	0.15	0.06	0.08	0.10	0.15	0.40	0.10
200 lin.ft. conduits, 1 in	0.22	0.10	0.11	0.10	0.12	0.05	0.08	0.10	0.15	0.30	0.10
24 outlet boxes	2.25	1.00	4.40	3.00	10.00	3.047	1.50	2.00	2.00	1.00	5.00
538,000 lb. structural steel	0.039	0.05½	0.05½	0.04½	0.05	0.047	0.0414	0.04½	0.04¼	0.05	0.052
116,500 lb. reinforced-steel bars	0.024	0.04	0.03½	0.03	0.04	0.03	0.0238	0.03¼	0.03	0.03	0.035
6500 lb. c.-i. drain	0.04	0.03	0.03½	0.03	0.05	0.03	0.03½	0.05	0.04	0.05	0.05
5500 cu.yd. filling	0.75	0.70	0.82	0.50	0.60	0.60	0.63	0.50	1.05	0.75	0.50
4 expansion joints	40.00	26.00	100.00	50.00	50.00	30.00	35.00	75.00	50.00	50.00	25.00
1 stairway	200.00	900.00	500.00	400.00	400.00	800.00	600.00	200.00	300.00	300.00	150.00
2550 lin.ft. protected curb	0.35	0.20	0.55	0.20	0.20	0.50	0.18	0.25	0.20	0.15	0.15
Extended totals	$88,524	$100,423	$128,417	$90,687	$96,238	$87,479	$82,788	$87,887	$128,333	$116,115	$91,051

Drainage—Northwood, Iowa—The County Supervisors of Worth County plan to establish a drainage district. C. N. Urdahl, Northwood, is County Audr.

Drainage—Sac City, Iowa—Bids are being received by the County Supervisors, Sac City, for work in Drainage District No. 29. J. W. Neal, Sac City, is County Audr.

+Ditch—Aitkin, Minn.—The county has awarded the contract to D. A. FOLEY & CO., for constructing Ditch 27, at $51,421.

+Dam—Osage, Minn.—J. B. Nygaard has awarded the contract to OSCAR NIELAND, Minneapolis, Minn., and SEVERT OLSON, Nenagha, Minn., for constructing a dam at Osage. The work calls for 10,000 cu.yd. of concrete.

Ditch—Red Lake Falls, Minn.—The Supervisors of Red Lake County plan to construct county ditch No. 19. L. P. Larson, Red Lake Falls, is County Audr.

Ditch—Roseau, Minn.—Bids will be received until 3 p.m., Aug. 16, by S. G. Bertilrud, County Audr., Roseau, for constructing Ditch No. 18. Estimated cost, $23,570.

Bathing Beach—St. Paul, Minn.—The city plans to construct a bathing beach at Lake Phalen. Estimated cost, $45,000. Oscar Claussen is City Engr.

Ditch Work—Walker, Minn.—Bids will be received until 10 a.m., Aug. 18, by I. P. Byhre, County Audr., Walker, for ditch work in Cass County.

Dams—Kirksville, Mo.—Adair Drainage District, Kirksville, has rejected all bids for constructing two dams across Charlton River in the district.

Natatorium—St. Louis, Mo.—Plans are being prepared by F. A. Hueser, Arch., City Hall, St. Louis, for a one-story natatorium to cost $40,000.

Levee—Eagle Lake, Tex.—The state plans to construct levees along the Colorado River in Colorado County, below Eagle Lake. Estimated cost, $100,000. J. C. Nagle, Austin, Tex., is Chn. State Bd. Water Engrs.

Interlocking System—Dallas, Tex.—See item under Railways: Texas.

Wharves, Docks, Etc.—Houston, Tex.—The citizens of Harris County will vote soon on the proposition to issue $3,000,000 in bonds for constructing wharves, docks and water terminals on the ship channel. Houston is the county seat. Noted July 9.

Wharf—Houston, Tex.—The International & Great Northern Ry. Co. plans to construct a wharf on the Houston Ship Channel. O. H. Crittenden, Houston, Tex., is Ch. Engr.

+Comfort Stations—Salt Lake City, Utah—The City Commissioners, July 28, awarded the contract to JOHN SHAY, Salt Lake City, for constructing comfort stations at South Temple and Main Sts., at $13,323.

Seawall, Etc.—Seattle, Wash.—The Streets and Sewer Commission of the City Council has recommended the construction of a seawall from Washington St. to Madison St., and filling and paving Railroad Ave. with brick. Estimated cost, $200,000.

Bulkhead—Seattle, Wash.—A. H. Dimock, City Engr., has completed plans for the bulkhead to be constructed along East Waterway. Estimated cost, $25,000. Noted July 16.

Drainage District—Tieton, Wash.—The County Commissioners of Yakima County, North Yakima, Wash., in conjunction with landowners, have established a drainage district at Tieton. Estimated cost of proposed work, $14,000.

Vessel—Wenatchee, Wash.—A company has been organized at Wenatchee to construct a passenger boat to ply between Bridgeport and Wenatchee, on the Columbia River. J. E. Proctor, Wenatchee, is interested.

+Gymnasium—Berkeley, Calif.—The California School for the Deaf and Blind has awarded the contract to FRANK GALLAGHER, Berkeley, for the construction of a gymnasium, at $39,900.

Wharf Extension—Los Angeles, Calif.—The Harbor Commission will have plans prepared for the extension of municipal wharf No. 1, at a cost of about $600,000. The structure is of concrete.

Fire and Police Alarm System—Los Angeles, Calif.—The city will ask for bids soon for the installation of a fire and police alarm system to cost $200,000. Homer Hamlin is City Engr.

Jetty—Newport Beach, Calif.—The city is considering the construction of a jetty at the mouth of the bay. Estimated cost, $100,000.

+Elevators—Oakland, Calif.—The H. C. Capwell Co., Oakland, has awarded a contract to the P. J. WALKER CO., San Francisco, Calif., for the installation of two elevators, at $20,000.

Piling—Richmond, Calif.—The City Council has awarded a contract for placing piling for the bulkhead at the harbor entrance to the HEALY-TIBBITS CONSTRUCTION CO., San Francisco, Calif., at $49,440.

+Walls—San Bernardino, Calif.—The Star Cement Co., Riverside, Calif., has been awarded the contract at $13,000 for constructing three concrete blanket-protection walls in the Cajon Pass on the Atchison, Topeka & Santa Fe Ry.

+Traveling Sidewalk—San Francisco, Calif.—The L. J. Myers Co., Chicago, Ill., has awarded a contract for the construction of a traveling sidewalk on the Exposition Grounds, at San Francisco, to the PACIFIC CAR EQUIPMENT Co., 625 Market St., San Francisco, at $11,375.

Creek Work—San Jose, Calif.—Bids will be received by J. G. McMillan, County Audr., San Jose, for improving and straightening the channel of Campbell Creek.

Fire Apparatus, Bulkhead—Venice, Calif.—The city plans to purchase fire apparatus to cost $25,000 and to repair the bulkhead at the canal entrance at Plaza del Ray at a cost of $25,000.

+Wharf Extensions—Cheverie, N. S.—The Department of Public Works, Ottawa, Ont., has awarded the contract to MORTIMER PARSONS, Cheverie, for constructing wharf extensions at Cheverie.

Breakwater—Digby, N. S.—Bids will be received until 4 p.m., Aug. 31, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for constructing a breakwater, at Gulliver's Cove, Digby.

Breakwater—East Chezzetcook, N. S.—Bids will be received until 4 p.m., Aug. 31, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for constructing an extension to the breakwater at Graff Beach, East Chezzetcook.

+Dredging—Maquapit Lake, N. B.—The Public Works Dept., Ottawa, Ont., has awarded the contract to the NEW BRUNSWICK CONSTRUCTING CO., St. John, N. B., for the dredging required at Maquapit Lake.

+Dredging—Beauport, Que.—R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., has awarded the contract to the W. J. POUPORE CO., LTD., McGill Bldg., Montreal, Que., for the dredging required at Beauport.

Fire Station—Lachine (Montreal post office) Que.—Bids are being received by Tetley & Dogart, Archs., Lachine, for the construction of a fire station to cost $15,000.

+Conduits—Montreal, Que.—The Electrical Commission has awarded the contract to L. A. HERDT, Montreal, for underground conduits.

Elimination of Grade Crossing—(Subway)—Montreal, Que.—The city, Aug. 3, opened bids for constructing the Park Ave. subway under the tracks of the Canadian Pacific Ry. as follows: L. A. Ott & Co., Montreal, $176,176; Laurin & Leitch Co., $185,000; Edmond Belanger, $194,000; Kennedy Construction Co., $203,134; Theodule Lessard, $207,900; T. L. MacBean, $225,000.

Grandstand—Quebec, Que.—Bids will be received in September by J. H. Pinsannault, Arch., Que., for the construction of a fire-proof grandstand at Quebec, to cost $100,000.

Wharf Extension—Ste. Anne de Saguenay, Que.—Bids will be received until Aug. 31, by R. C. Desrochers Secy. Dept. Pub. Wks., Ottawa, for constructing an extension to the wharf at Ste. Anne de Saguenay.

Harbor Improvements—Hamilton, Ont.—Bids will be received until 4 p.m., Aug. 31, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for harbor improvements at Hamilton.

Wharf—Kensington, Ont.—Bids will be received until 4 p.m., Aug. 31, by R. C. Desrochers, Secy. Dept. Pub. Wks., Ottawa, Ont., for constructing a wharf at Kensington.

Breakwater Extension—Kingston, Ont.—The Department of Public Works, Ottawa, Ont., plans to construct an extension to the breakwater at Kingston. R. C. Desrochers is Secy.

CONTRACT PRICE

Intercepting Sewer—Newark, N. J.—Bids were received July 28, by the Passaic Valley Sewerage Commissioners for constructing Section 14 and part of Section 27 of the main intercepting sewer, from (A) Fusco Construction Co., Newark; (B) Merrill-Ruckgaber Co. and Mason, Hilton & Co., New York N. Y.; (C) New York & New Jersey Construction Co., Newark; (D) Booth & Flinn, Ltd., New York, N. Y.; (E) Charles A. Haskins, Charlestown, Mass; (F) Cauldweel-Wingate Co., New York, N. Y.; (G) Whiting Turner Construction Co., Baltimore, Md.; (H) Beaver Engineering & Contracting Co., New York, N. Y.; (I) Bruno & Petitti, Belleville, N. J. The item bids were as follows:

INTERCEPTING SEWER, NEWARK, N. J.

Part of Section 27

	A	B	C	D	E		
765 lin.ft. excavation for 48-in. sewer	$227.00	$86.00	$85.00	$61.00	$62.00	.....	.....
650 cu.yd. concrete masonry in compressed-air tunnel	20.00	10.00	10.00	15.00	8.00	.....	.....
170 cu.yd. brick masonry	20.00	15.00	15.00	15.00	12.00	.....	.....
25,000 lb. steel for concrete reinforcement	0.05	0.05	0.05	0.04	0.03	.....	.....
Extended totals	$191,090	$76,090	$75,325	$59,965	$55,420	.....	.....

Section 14	A	B	C	F	G	H	I
2566 lin.ft. earth excavation and refilling in trench for 90-in. sewer	$57.00	$36.00	$50.00	$45.00	$37.00	$36.00	$30.00
680 lin.ft. excavation in earth, rock, or earth and rock, for 90-in. sewer	87.00	53.50	90.00	119.00	92.00	53.00	60.00
100 cu.yd. rock excavation	6.00	5.00	5.00	5.00	4.00	5.00	4.00
3500 cu.yd. concrete masonry in trench	8.50	9.00	8.00	8.66	8.75	9.00	8.00
1200 cu.yd. concrete masonry in tunnel	12.00	10.00	12.00	10.00	9.75	9.00	10.00
100 cu.yd. brick masonry	20.00	15.00	20.00	18.00	16.00	20.00	20.00
50 000 lb. steel for concrete reinforcement	0.05	0.04	0.04	0.04	0.04	0.03	0.03
3500 tons riprap	3.00	3.00	2.00	3.00	3.00	1.50	3.00
Extended totals	$265,172	$186,756	$243,409	$253,500	$214,327	$179,966	$172,180

✚Dredging—Ottawa, Ont.—The Department of Public Works, Ottawa, has awarded the contract to the C. S. BOONE DREDGING & CONSTRUCTION CO., LTD., 17½ Adelaide St., Toronto, Ont., for dredging in Little Detroit River, Ont., at $12,000.

Drainage Work—Ottawa, Ont.—Bids will be received until noon, Aug. 20, by L. K. Jones, Secy. Dept. Rys. and Canals, Ottawa, for draining Clement's Gully, Soulanges Canal.

Cement—Ottawa, Ont.—Bids will be received until 10 a. m., Aug. 25, by L. K. Jones, Secy. Dept. Rys. and Canals, Ottawa, for 2,500,000 bbl. of portland cement for use in the construction of the Welland Canal.

✚Ditch Work—Dauphin, Man.—The Rural Municipality of Dauphin has awarded the contract to H. M. THOMPSON, Dauphin, for 180,000 cu.yd. of ditch work, at 13c. per cuyd.

Park Work—Winnipeg, Man.—The Parks Board plans to spend $10,000 to improve Kildoan Park .

✚Fire Alarm System—Winipeg, Man.—The City Council has awarded the contract to the GAMEWELL FIRE ALARM CO., New York, for installing a fire alarm system, at $30,980.

Cranes—Vancouver, B. C.—The Port Commission plans to purchase floating cranes for handling heavy cargoes.

BUILDINGS

Boston, Mass.—A. Snyder will build a $50,000 apartment house on Homestead St., Roxbury District.

✚New Bedford, Mass.—The contract for erecting the bank building for the Merchants National Bank has been awarded to the J. W. BISHOP CO., Worcester, Mass., at about $300,000.

Pawtucket, R. I.—The Broad St. Power Co. will build a two-story store and office building on Broad St., to cost about $125,000. J. T. Payne is Mgr.

Buffalo, N. Y.—Joseph J. Geigand, Arch., 346 Herman St. is preparing plans for a theater at High and Maple Sts. for Joseph Welte, 214 Locust St., to cost about $40,000.

Dunkirk, N. Y.—Bids will be received by John A. Weidman, Secy. Bd. of Education, until 7:30 p.m. Aug 14, for the erection of a school in the Union Free school district.

Lockport, N. Y.—The plans of William McNeil Smith, Arch., New York, N. Y., have been accepted by the Board of Education for building an addition to the high school, estimated to cost $85,000.

New York, N. Y.—(Borough of Manhattan)—Jackson, Rosencrans & Waterbury, 1328 Broadway, have prepared plans for a 13-story brick hotel on 30th St. near Eighth Ave. to cost about $185,000.

Plans have been completed by C. P. H. Gilbert, 1123 Broadway, for an 11-story apartment at 1066 Fifth Ave., estimated to cost $400,000.

✚The contract for erecting the six-story limestone and marble residence for Mrs. E. B. Fischer, 7 East 79th St. has been awarded to M. REID & CO., 116 West 39th St. at about $250,000. H. Van Beuren Magonigle, 101 Park Ave., prepared the plans.

Niagara Falls, N. Y.—C. F. Obenback, Gluck Bldg., has prepared plans for a four-story city hall, 88x188 ft., estimated to cost $400,000. William Laughlin is Chn. of the Bldg. Comn.

✚Rochester, N. Y.—(Official)—The contract for erecting the Y. M. C. A. building on Gibbs St. has been awarded to GEORGE ROSSELL, Rochester at about $385,000.

Troy, N. Y.—The Troy Gas & Electric Co., Troy Savings Bank Bldg., have approved of the plans of Louis N. Milliman, Troy, for the four-story brick and steel office building on Second St.

✚Atlantic City, N. J.—The contract for building a 17-story addition to the Hotel Traymore has been awarded to CRAMP & CO., Philadelphia, Penn., at about $2,500,000.

Burlington, N. J.—Plans are being prepared by Oakley & Son, 284 North Broad St., Elizabeth, for an addition to the Masonic Bldg., estimated to cost $75,000.

Morristown, N. J.—The Trustees of the Memorial Hospital plan to build an addition to the hospital, to cost about $100,000.

Newark, N. J.—Hyman Rosensohn, Arch., has completed plans for a four-story brick building for William J. Underwood, estimated to cost $45,000.

Seabright, N. J.—Jackson, Rosencrans & Waterbury, Archs., New York, N. Y., are preparing plans for a hotel to replace the former Octagon Hotel. The estimated cost is $650,000.

Trenton, N. J.—The St. Regis Corporation, Philadelphia, has secured a site on East State St. and is having plans prepared for a theatre to cost about $110,000. Henon & Boyle, Philadelphia, are the Archs.

Erie, Penn.—W. P. Ginther, Akron, Ohio, is preparing plans for St. Andrew's Church at Seventh and Raspberry Sts., to cost about $80,000. Rev. W. F. Dwyer is Pastor.

✚Philadelphia, Penn.—The contract for the construction of the six-story building on North Broad St., for Benjamin Alexander, has been awarded to CRAMP & CO., Philadelphia, at about $200,000. Charles E. Oelschlager is the Arch.

✚Philadelphia, Penn.—The contract for erecting the four-story school at Germantown Ave. and Hugh St. has been awarded to THOMAS REILLY, 1616 Thompson St., at about $75,000.

Pittsburgh, Penn.—It is reported that bids will be received by the Board of Education for constructing the William H. McKelvey grade school, to cost about $224,000.

★Wilmington, Del.—(Official)—Bids will be received by the New Castle County Building Commission and the Wilmington Building Commission for completing the county building for New Castle County and the municipal building for the city, at French and Tenth Sts. Thomas F. Gormley is Secy. For further information see advertisement under "Contracts To Be Let." Noted May 28 and Aug 6.

✚Baltimore, Md.—The contract for the construction of the Garden Theatre, at 114 West Lexington St., has been awarded to the GEORGE A. FULLER CO., New York, N. Y. The estimated cost is $165,000.

Kublitz & Stenson, Archs., have completed plans for a 12-story brick and reinforced concrete store and office building at 51 Liberty St. for Louis Applefeld.

The contract for erecting the theater for the Garden Theater Co. on Park Ave. and Clay St. has been awarded to J. HENRY MILLER, Baltimore, at about $200,000.

Baltimore, Md.—Louis Levi, Arch., American Bldg., is preparing plans for a brick and concrete building at 511 West Pratt St. for the United Woolen Mills. The estimated cost is $200,000.

Atlanta, Ga.—(Official)—The following contractors have been invited to submit bids for constructing the Connally office building, from plans prepared by W. L. Stoddard, 1023 Candler Bld., Atlanta, bids to be opened Aug. 26: Selden Breck Construction Co., St. Louis Mo.; Cauldwell Wingate Co., 381 Fourth Ave., New York, N. Y.; Wells Bros. Co., Washington, D. C.; George A. Fuller Co., Washington, D. C.; The Whitney Co., 1 Liberty St., New York, N. Y.; Norcross Bros. Co., 103 Park Ave., New York, N. Y.; Wilke & Hague, 418 Wrightwood Ave., Chicago, Ill.; Miles & Bradt, Atlanta, Ga.

✚Griffin, Ga.—The contract for building the Union Passenger Station has been awarded to the GRESHAM MFG. CO., Savannah, Ga., at about $40,000.

✚Fort Myers, Fla.—The Board of County Commissioners has awarded the contract for constructing the court house to F. B. HEIFNER, Fort Myers, at about $75,000.

Shreveport, La.—Thomas C. Barrett, Shreveport, is having plans prepared for a four-story brick and concrete hotel at Louisiana and Crockett Sts. to cost about $50,000.

Memphis, Tenn.—The congregation of the Children of Israel plant to build a temple, to cost $40,000.

Memphis, Tenn.—Jones & Furbringer, Archs., Memphis, are preparing plans for a 12-room school in the Prescott School District to cost about $55,000.

Louisville, Ky.—Bids will be received by the Business Director, Board of Education, until Aug. 19, for the erection of two schools. Joseph & Joseph, Great Southern Bldg., and Hutchings & Sons, Columbia Bldg., are the Archs.

✚The contract for erecting the Cypress St. school has been awarded to the ALFRED STRUCK CO., at $81,999.

✚Akron, Ohio—The contract for the erection of the O'Neill Bldg., on Main St. has been awarded to the CARMICHAEL CONSTRUCTION CO., at $140,000.

Cleveland, Ohio—E. F. Gibbons, 1900 Euclid Ave., is preparing plans for an eight-story reinforced-concrete building, to be erected on Prospect Ave., for the Belmont Realty Co.

Hudson, Ohio—Bids will be received by J. W. Corbusier, Lennox Bldg., Cleveland, until Sept. 1, for constructing a two-story brick school, including gymnasium.

Lakewood, Ohio—Bids will be received by W. H. Nicklas, 1900 Euclid Ave., until Aug. 17, for constructing a church on Clifton Blvd., for the Lakewood Congregational Organization. The estimated cost is $50,000.

Rittman, Ohio—Bids will be received until Aug. 14, by Engr. Daniels, of the National Engineering Co., 504 Marshall Bldg., for the erection of a high school at Rittman. The estimated cost is $40,000.

✚Youngstown, Ohio—The contract for constructing the Hippodrome Bldg. has been awarded to the GEORGE A. FULLER CO., Pittsburgh, Penn. Knox & Elliott, Rockefeller Bldg., Cleveland, are the Archs.

Indianapolis, Ind.—It is reported that the Fraternal Order of Eagles plans to erect a lodge building at Illinois and Vermont Aves. to cost about $50,000.

✚Detroit, Mich.—(Official)—Contracts for the erection of the three-story and basement high school at Detroit, have been awarded as follows: Masonry, C. A. SAUER & CO.; steel, LEWIS & HALL, carpentry, HARCUS & CO., heating and ventilating, ERNST BROS. Noted July 9.

✚Grand Rapids, Mich.—The contract for erecting the building for the Knights of Columbus, has been awarded by the Council to HORNER & KELLY, Grand Rapids, at about $60,000. Noted Aug. 6.

Chicago, Ill.—George L. Berman will erect an office building at Cottage Grove Ave. and 47th St. The estimated cost is $100,000. H. R. Wilson is the Arch., 104 South Michigan Ave.

Streator, Ill.—Bids will be received by the Directors of the Y. M. C. A., until Aug. 17, for constructing a building estimated to cost $40,000. W. G. Foster, Streator, is the Arch.

✚Urbana, Ill.—(Official)—The contract for the erection of the chemistry building at the University of Illinois, has been awarded to FREEMAN & BROOKS, Champaign, Ill. Noted July 23.

Ames, Iowa—It is reported that bids will be received by Sheldon & Munn, Ames, until Aug. 17, for constructing a four-story store and hotel, 100x100 ft. from plans prepared by Proudfoot, Bird & Rawson, Des Moines.

(Buildings continued on page 120)

CONTRACT PRICE

Rapid Transit System—New York, N. Y.—Bids were received July 23 by the Public Service Commission for constructing Sections 1 and 2, Route 11-B, from (A) Station Construction Co., 277 Broadway, New oYrk; (B) Marble Arch Co., Broadway and 216th St., New York; (C) Snare & Triest Co., Woolworth Bldg., New oYrk; (D) P. J. Carlin Construction Co., 1123 Broadway, New York; (E) Conners Brothers Co., 153 West Kingsbridge Road, New oYrk; (F) McKinly Engineering Co., 51 Chambers St., New oYrk; (G) Thomas J. Euckley Construction Co., 303 Fifth Ave., New York; (H) Carpenter, Boxley & Herrick, 375 Ovington St., Brooklyn, N. Y.; (I) E. E. Smith Contracting Co., 101 Park Ave., New York; (J) Norton & Gorman Co., 303 Douglas St., Brooklyn, N. Y. The item bids were as follows:

RAPID TRANSIT SYSTEM, NEW YORK, N. Y.

Section 1 and 2. Route 11-B.

	A	B	C	D	E	F	G	H	I	J
42,100 Sq. ft. Tile—3 x 6 in., straight	$0.50	$0.50	$0.50	$0.50	0.$45	$0.56	$0.46	$0.57	$0.70	$0.55
50 Sq.ft. Tile—3 x 6 in., 1 in	1.30	1.50	1.10	1.40	1.46	1.43	1.41	1.52	1.75	1.75
1,320 Sq.ft. Tile—3 x 6 in., 2½ in	1.23	1.00	1.10	1.25	1.36	1.30	1.23	1.39	1.60	1.54
50 Sq.ft. Tile—3 x 6 in., 20 in	.85	1.00	1.10	1.00	1.33	.80	1.22	.85	1.00	1.03
12,950 Sq.ft. Tile—3 x 9 in and 6 x 9 in., straight	.71	.60	.70	.70	.70	.83	.67	.80	1.00	.78
50 Sq.ft. Tile—3 x 8 in. and 6 x 9, $ in	1.26	1.00	1.40	1.00	1.34	.95	1.22	1.00	1.00	1.54
750 Sq.ft. Tile—3 x 9 in. and 6 x 9 in., 2½	1.23	1.00	1.40	1.35	1.37	1.53	1.23	1.64	2.00	1.54
375 Lin.ft. Tile Bead, 1 in	.12	1.00	.35	.20	.14	.37	.14	.40	.45	.40
12,900 Sq.ft. Mosaic and tile bands	1.10	1.20	1.10	1.10	1.10	1.45	1.14	1.41	1.75	1.40
825 Sq.ft. Mosaic and tile name tablets	1.21	1.20	1.20	1.10	2.80	1.45	1.04	1.53	1.75	1.40
288 Mosaic and tile initial letters	1.21	1.20	2.00	1.10	4.10	1.45	[illegible]	3.50	1.75	1.40
65 Sq.ft. Mosaic and tile tablets (train desk)	1.21	1.20	1.40	1.10	2.80	1.45	[illegible]	1.53	1.75	1.60
8,310 Sq.ft. Glassed terra cotta tile, straight	1.20	1.60	1.30	1.35	1.10	1.30	.00	1.05	1.00	1.40
155 Sq.ft. Classed terra cotta tile, 2½ in	1.30	1.60	1.40	1.50	.30	1.40	.82	1.17	1.75	1.60
8,500 Sq.ft. marble base, straight	1.65	1.50	1.80	1.60	1.57	1.75	1.50	1.98	2.25	2.04
185 Sq.ft. marble base, 2½ in	2.15	10.00	5.00	8.00	9.50	6.15	8.00	6.87	7.50	7.05
10 Sq.ft. marble base, 20 in	4.80	15.00	6.00	17.00	18.90	11.60	15.00	13.00	15.00	13.34
20 Cu.ft. marble lintels, "A" lettered	22.00	25.00	30.00	24.00	24.77	27.85	24.00	31.00	35.00	31.98
50 Cu.ft. marble lintels "A" no letters	15.00	20.00	28.00	20.00	21.00	21.35	25.00	24.00	27.50	24.57
25 Cu.ft. marble lintels, "B" and "C"	15.00	12.00	20.00	20.00	24.15	10.86	23.00	12.00	13.50	12.48
10 Cu.ft. marble soffits and blocks	11.00	12.00	20.00	18.00	19.42	10.10	20.00	11.30	12.50	15.00
23,440 Sq.yd. plastering (arched) on concrete	.75	1.10	.85	.70	.71	.75	1.30	.78	.90	1.05
4,680 Sq.yd. plastering flat, on brick or H. T.	.55	.70	.80	.75	.80	.85	1.20	.89	1.00	.89
10,785 Sq.yd. plastering flat on concrete	.55	.50	.80	.70	.61	.65	1.20	.68	.80	1.15
8,565 Sqlft. cement work, wainscoating or base	.16½	.20	.20	.30	.12	.10	.30	.29	.33	.25
7,470 Lin. ft. cement work, cove	.10	.15	.12	.30	.$7	.08	.20	.33	.35	.25
106,960 Sq.ft. cement work, floor finish	.15	.15	.12	.16	.17	.15	.20	.17½	.10	.20
21,145 Sq.ft. cement finish, on concrete, brick or H. T	.12	.10	.12	.12	.10	.08	.12	.14	.11	.11
55 Sq.ft. cement work, sign panels	.33	2.00	2.00	.30	.12	2.20	.12	.25	2.75	.20
455 Cu.ft. concrete copings	1.00	.80	1.00	1.10	.60	.60	.75	1.11	1.25	.85
75 Culyd. concrete foundation	8.80	15.00	14.00	9.00	8.10	8.00	10.00	9.35	10.50	15.00
40 Cu.ft. concrete, reinforced	.50	.70	1.50	1.00	.96	.70	.50	.93	1.00	.60
40 Cu.ft. concrete, protective	.72	.80	1.50	.80	1.20	1.00	1.00	.76	.90	1.25
225 Cu.ft. concrete, street landings	.50	.60	1.00	.60	.60	.60	.25	.53	.60	.50
5,400 Lin.ftl concrete stairs, self supporting	1.60	1.00	1.00	2.10	2.25	1.80	2.25	2.20	2.50	2.75
225 Sq.ft. concrete landings, self supporting	.65	.25	.50	.70	.50	.50	.58	.75	.90	.60
3,520 Lin.ft. concrete stairs, supported	1.32	1.00	.60	1.30	1.60	1.10	1.60	1.40	1.60	1.75
825 Sq.ft. concrete landing, supported	.45	.25	.25	.50	.42	.30	.30	.52	.50	.60
120 Cu.ft. concrete stair columns	1.25	.60	1.00	1.80	1.00	.80	1.00	1.75	2.00	1.10
4,715 Sq.ft. safety treads	.95	.50	.90	1.00	1.00	.70	.65	1.12	1.25	1.50
2,065 Lin.ft. concrete wall strings	.28	.30	.44	.50	.35	.25	.35	.41	.50	.40
550 Lin.ft. concrete finish side of stairs	.20	.30	.44	1.00	.20	.14	.30	.82	.90	.40
615 Sq.ft. concrete finish on street landings	.17	.30	.20	.25	.13	.15	.10	.17	.20	.25
5,300 Sq.ft. brick masonry, face (straight)	.54	.60	.50	.50	.60	.50	.60	.58	.85	1.00
10 Sq.ft. brick masonry, face (curved)	1.00	3.00	4.00	1.50	1.10	.90	2.00	.87	1.75	1.50
9,435 Cu.ft. brick masonry, common	.39	.55	.44	.50	.45	.65	.80	.47	.65	.70
15 Cu.ft. hollow tile, 2 in	1.10	1.00	.80	.70	.70	.60	2.00	.76	.65	.75
18,565 Cu.ft. hollow tile, 3 in	.70	.70	.38	.60	.60	.50	.80	.53	.65	.65
2,060 Cu.ft. hollow tile, 4 in	.53	.60	.33	.55	.50	.60	1.00	.41	.65	.55
115 Lin.ft. hollow tile, 4½ x 13 in	.17	.60	.80	.50	.00	.40	1.00	1.16	1.00	.75
5 ticket booths, type "B"	770.00	900.00	800.00	1,110.00	798.00	1,225.00	800.00	1,362.50	1,500.00	1,250.00
1 ticket booth, Type "E"	900.00	1,000.00	1,000.00	1,000.00	997.50	1,290.00	1,000.00	1,310.00	1,500,.00	1,200.00
3 News stands, type "A"	500.00	700.00	650.00	660.00	682.50	765.00	500.00	820.00	1,000.00	750.00
3 News stands, type "B"	1,000.00	1,200.00	1,150.00	1,150.00	1,181.25	1,285.00	500.00	1,400.00	1,500.00	1,280.00
3 Doors, type "A"	70.00	80.00	80.00	75.00	82.45	07.00	70.00	82.00	90.00	75.00
5 Doors, type "A"	100.00	130.00	140.00	135.00	140.70	135.00	110.00	152.00	175.00	140.00
1 Door, type "C"	90.00	100.00	100.00	130.00	113.00	135.00	100.00	157.50	180.00	145.00
48 Doors, type "D"	60.00	74.00	90.00	80.00	90.30	80.00	80.00	85.00	100.00	90.00
24 Doors, type "G"	50.00	50.00	50.00	55.00	52.50	52.00	50.00	58.00	70.00	60.00
3 Doors, type "J"	50.00	75.00	100.00	60.00	78.75	80.00	70.00	64.00	70.00	80.00
211 Doors, type "K"	1.90	4.00	5.00	4.00	4.20	3.50	4.00	4.10	4.50	4.00
66 Doors, type "L"	.90	4.00	6.00	3.80	4.20	3.50	4.00	4.10	4.50	4.00
1 Door, type "M"	55.00	60.00	65.00	68.00	67.20	73.00	50.00	82.00	90.00	75.00
4 Door, type "P"	42.00	38.00	40.00	63.00	39.90	60.00	38.00	70.00	80.00	70.00
180 Sq.ft. windows, double hung	1.50	2.00	1.00	3.00	1.60	3.50	1.00	3.50	4.00	4.00
25 Sq.ft. windows, casement	1.50	2.00	1.20	3.50	1.60	4.50	2.00	1.70	5.50	4.25
12 Door checks	4.20	4.00	5.00	4.15	4.00	4.85	4.50	5.00	5.-	4.50

60 Door stops	2.15	2.00	2.00	2.25	2.10	3.25	2.25	3.20	3.50	3.00
6 Chains	1.10	1.00	1.00	1.25	1.05	1.50	1.25	1.58	1.80	1.50
12 Push plates	2.60	2.30	2.50	3.00	2.55	3.50	2.75	3.50	4.00	3.50
12 Pulls	4.13	3.60	4.00	4.15	3.90	4.80	4.00	4.90	5.50	4.50
12 Kick plates	7.43	6.50	8.00	7.50	7.10	9.00	7.25	9.25	10.50	9.00
325 Lin.ft. railings, low straight	3.41	3.25	5.00	3.50	5.50	5.25	5.00	5.25	4.00	5.16
710 Sq.ft. railings, high straight	.45	.50	1.20	.60	.90	.85	.75	.83	.50	.84
140 Lin.ft. railings, bevel	4.90	5.00	5.00	5.00	7.00	7.00	6.50	9.30	6.00	9.30
525 Sq.ft. railings, grill	1.21	1.25	1.00	1.50	3.15	1.75	2.00	1.93	1.50	1.92
25 Lin.ft. rialings, pipe	2.00	3.00	2.00	3.00	3.50	3.45	3.00	2.95	3.00	2.65
80 Lin.ft. low sliding gate	10.00	10.00	9.00	9.00	8.40	8.00	8.00	11.00	13.50	11.10
35 Lin.ft. folding gate	6.60	6.00	9.00	7.00	8.75	8.25	8.00	11.55	8.00	11.40
12 Lin.ft. swing gate	10.00	9.00	10.00	10.00	5.75	5.50	5.50	9.25	12.00	9.00
7 Turnstiles	145.00	150.00	280.00	200.00	231.00	215.00	250.00	350.00	175.00	1.50
10 Gate controls	8.25	10.00	30.00	30.00	37.80	37.50	20.00	38.50	10.00	39.60
6 Floor boxes	2.20	5.00	12.00	5.00	5.75	5.50	5.00	8.00	2.50	8.40
200 Lin.ft. 1¼-in. galvanized pipe	.14	.15	1.00	.25	.40	.35	.25	.60	.15	.80
50 Lin.ft. 1-in. square tubing	.16	.20	1.80	1.25	1.15	1.15	1.00	1.16	.20	1.60
50 Lb. C. I. fittings	.06	.10	.40	.09	.08	.10	.10	.29	.07	.80
16 C. I. gate posts	30.80	30.00	70.00	40.00	47.25	50.00	40.00	48.00	46.00	50.20
2C. I. vent posts	88.00	100.00	135.00	100.00	262.50	250.00	250.00	385.00	100.00	396.00
20 Illuminating sign frames	44.00	50.00	85.00	50.00	87.15	85.00	80.00	148.50	50.00	150.00
6 Sq.ft. sign for high railiug	3.30	5.00	7.00	5.00	2.40	2.25	2.25	2.92	4.00	3.10
230 Lin.ft. reflectors	.77	1.00	2.30	3.00	7.25	7.00	6.00	5.20	1.00	4.80
410 Sq.ft. sign plates, enameled	.55	1.00	2.20	.65	.40	.70	.70	1.16	.70	1.00
7,150 Vert. in. copper letters	.10	.10	.12	.13	.12	.15	.20	.17	.12	.20
16 Street hoods, type "A"	850.00	900.00	900.00	900.00	1,410.00	1,400.00	1,300.00	1,520.00	1,200.00	1,500.00
2 Street hoods, type "C"	1,000.00	1,000.00	1,200.00	1,000.00	2,415.00	2,400.00	2,000.00	2,510.00	1,200.00	2,530.00
5 Street hoods, type "D"	550.00	700.00	700.00	600.00	997.00	950.00	1,000.00	1,167.00	750.00	1,170.00
15 Tread. lin.ft. steel ladders, etc	3.00	4.00	3.00	3.25	3.45	3.50	3.00	4.20	4.00	4.80
20 Sq.ft. steel ladders, platforms	1.50	2.00	4.00	2.15	2.35	2.25	2.00	4.20	2.00	4.80
4,000 Lb. shapes for lintels	.035	.03	.05	.04	.03½	.03	.05	.06	.04	.06
2,520 Lin.ft. wood hand rails	.88	1.00	.50	1.00	1.70	1.70	1.60	1.70	1.10	1.65
19,200 Sq.ft. platform edge, safety treads	.10	.20	.70	1.10	.90	.80	.80	1.24	1.40	1.60
Rough plumbing (6 stations) lump sum	11,479.00	4,000.00	10,000.00	6,000.00	9,000.00	6,210.00	8,000.00	6000.00	9,200.00	7,500.00
24 Water closet bowls	58.00	50.00	70.00	60.00	52.50	58.00	75.00	70.00	70.00	75.00
12 Toilet lavs	43.00	40.00	65.00	50.00	34.50	40.00	70.00	58.00	45.00	70.00
2 Signal tower lavs	43.00	60.00	125.00	60.00	59.75	65.00	130.00	64.00	75.00	68.00
12 Urinals	85.00	100.00	115.00	150.00	85.00	112.70	125.00	105.00	220.00	131.00
6 Slop sinks	80.00	80.00	55.00	85.00	79.00	93.00	60.00	93.50	100.00	120.00
21 Floor drains	33.00	15.00	20.00	16.00	15.50	18.00	25.00	23.50	18.00	20.00
550 Lin.ft. supply pipe, 1-in	.50	.40	.42	.16	1.00	.29	.50	.17		
575 Sq.ft. ⅛-in. wainscot and trimming	1.10	1.25	1.40	1.10	1.00	1.50	1.25	1.40	2.50	1.20
1,120 Sq.ft. ⅛-in P. C. partitions	1.37	1.75	1.70	1.80	1.90	1.80	1.75	1.80	3.00	1.98
50 Sq.ft. ⅛-in. shelves	1.21	1.75	1.70	1.60	1.50	1.85	1.65	1.80	2.50	2.00
465 Sq.ft. ⅛-in. stall partitions	1.93	1.75	1.60	1.80	1.70	2.85	1.75	1.70	3.00	1.98
55 Sq.ft. 1-in. floor slabs	1.90	1.75	5.00	1.70	1.50	3.00	1.65	5.80	2.50	1.90
230 Lin.ft. curves and angles	1.10	1.75	1.00	1.70	1.50	150.00	1.65	.94	4.00	1.85
55 Posts	11.00	8.00	17.00	8.00	3.20	25.00	12.00	17.50	15.00	10.00
165 Lin.ft. top rails	.75	.50	1.20	1.50	.60	1.15	2.00	1.75	1.25	1.00
35 C. I. wall flanges	2.00	.30	1.20	2.00	.25	9.00	2.00	5.85	2.50	1.00
8,370 lb. Steel angles, plates, etc., for supporting glass	.08	.05	.08	.05	.04	.10	.08	.17	.05	.12
24 Hooks in toilets	.55	.50	3.00	10.00	1.00	1.00	1.25	.60	1.50	1.00
8,275 Lin.ft. electric conduits, ½-in	.17	.15	.15	.20	.20	.20	.20	.20	.16	.27
1,455 Lin.ft. electric conduits, 1-in	.22	.20	.20	.22	.25	.30	.22	.22	.30	.36
7,750 Lin.ft. electric conduits, 1¼-in	.29	.25	.26	.30	.30	.35	.30	.28	.40	.46
1,870 Lin.ft. electric conduits, 2-in	.40	.35	.32	.35	.38	.50	.40	.36	.50	.71
100 Lin.ft. electric conduits, 2½-in	.54	.50	.45	.55	.55	70	.60	.51	.90	.84
100 Lin.ft. electric conduits, 3-in	.70	.60	.60	.70	.73	.95	.80	.67	1.25	1.02
500 Lin.ft. electric conduit, ½-in. flexible conduit	.15	.20	.20	.25	.20	.30	.20	.17	1.00	.29
715 C. I. outlet boxes	.88	1.00	1.00	.80	.80	1.00	1.00	.76	1.00	1.15
45 C. I. pull boxes, 6x6x6 in	1.65	3.00	3.00	3.50	1.60	5.85	1.75	3.85	2.00	7.00
50 C.I. pull boxes, 12x12x6 in	3.70	5.00	8.00	3.80	3.45	6.75	4.00	6.10	5.00	11.20
14 C. I. pull boxes, 18x12x6 in	5.50	8.00	12.00	5.50	5.25	14.25	6.00	8.90	8.00	16.60
6 C. I. pull boxes, 24x18x6 in	10.50	15.00	18.00	9.00	10.00	15.50	11.00	15.90	12.00	17.80
33C. I. heater boxes	18.00	15.0	6.00	16.00	16.80	30.00	20.00	13.90	15.00	30.00
2 Steel panelboard boxes 25x60x5½ in	26.00	25.00	25.00	26.00	25.00	30.00	30.00	18.50	15.00	40.00
5 Steel panel board boxes 25x48x5½ in	20.00	20.00	25.00	22.00	21.00	24.85	25.00	16.25	12.50	40.00
13 Steel panel board boxes, 25x36x5½ in	15.00	15.00	20.00	16.00	16.00	21.75	20.00	14.00	10.00	30.00
6 Steel switchboard boxes	50.00	50.00	25.00	60.00	58.00	57.50	60.00	32.70	18.00	60.00
37,400 Sq.ft. painting iron, steel, etc., 2 coat iron	.025	.02	.02	.02	.04	.02½	.03	.03½	.02½	.025
108,350 Sq.ft. painting iron, steel, etc., 3 coat on iron	.033	.02½	.02½	.04	.05	.03½	.04	.05½	.03½	.035
350,120 Sq.ft. painting iron, steel, etc., 3 coat on plaster	.0275	.02½	.02½	.03	.03	.03½	04	.02½	.04	.035
820 Painting iron and steel, etc., letters and numbers	.22	.10	.50	.20	.20	.15	.15	.15	1.00	.10
Extended totals	$351,134	$257,140	$274,246	$291,246	$298,206	$309,155	$334,451	$327,331	$378,103	$375,082

(Buildings continued from page 117.)

Waterloo, Iowa—Marshall & Fox, Chicago, Ill., are preparing plans for a four-story brick and stone building on Commercial and Fourth Sts. for Mrs. C. O. Lamson. The estimated cost is $250,000.

Philipsburg, Mont.—J. H. Ehlers, Sayers Bldg., Spokane, will erect a tuberculosis hospital at Philipsburg. The estimated cost is $75,000.

✚St. Louis, Mo.—The contract for constructing the eight-story building on Olive St., for the Joseph Pulitzer Estate, has been awarded to JAMES STUART & CO., at about $65,000.

Hot Springs, Ark.—The lowest bid submitted for erecting the Central Methodist Church was from J. D. Brook, Hot Springs, at $68,100. John Gaisford, Memphis, Tenn., is the Arch.

Prescott, Ariz.—The Supervisors of Yavapai County plan to erect a courthouse to cost about $250,000.

Bellingham, Wash.—The Board of Education has had plans prepared by T. F. Doan, Arch., Sunset Block, for the erection of a brick and concrete school. The estimated cost is $50,000.

✚Port Angeles, Wash.—(Official)—The contract for constructing the two-story and basement brick courthouse has been awarded to the SOUND CONSTRUCTION & ENGINEERING CO., Seattle, at $57,688. Francis W. Grant prepared the plans. Noted July 30.

✚Seattle, Wash.—The contract for constructing the 10-story hotel for the Rainier Heat & Power Co., has been awarded to DITLEFSEN & GERRING, at $160,000. Noted July 30.

The city contemplates erecting an auditorium at Seattle. The estimated cost is $250,000.

Los Angeles, Calif.—Arthur Lindley, Hollingsworth Bldg., is preparing plans for a five-story hotel at Fourth St. and Gladys Ave. The estimated cost is $100,000.

Los Angeles, Calif.—Austin & Pennell, Archs., Wright & Callender Bldg., are preparing plans for the erection of a building on Wilshire Blvd., for the Marlborough School for Girls. The estimated cost is $60,000.

Oakland, Calif.—Bids will be received until noon, Aug. 20, by the City Council for completing of the municipal auditorium, including elevators, marble and tiling, cement finish, seating, plastering and electrical work. Frank M. Smith is City Clk.

Cunningham & Politeo, Archs., First National Bank Bldg., San Francisco, Calif., have been commissioned to prepare plans for a seven-story hotel for Blake & Moffitt, to cost about $200,000.

✚San Francisco, Calif.—The Panama-Pacific International Exposition Co. has awarded a contract for the construction of a Court of the Universe on the Exposition site to STREHLOW, FREESE & PETERSEN, at $53,900.

Shea & Lofquist, Archs., 742 Market St., are completing plans for a three-story brick school for St. Paul's Parish, estimated to cost $50,000.

The Board of Public Works has had plans completed for the Polytechnic High School, which is to cost $165,000. Bids will be called soon for the work.

✚San Francisco, Calif.—The contract for erecting the six-story brick and steel store and apartment for the Traders Realty Co., at Jones and Ellis Sts. has been awarded to G. P. W. JENSEN, 320 Market St. at about $120,000. J. R. Miller, Lick Bldg. prepared the plans.

G. A. Applegarth, Arch., Call Bldg., has completed plans for a five-story apartment at Stockton and California Sts. for D. Clinton. The estimated cost is $70,000.

Wollett & Wollett, Newhall Bldg., have completed plans for a theater at Mason and Eddy Sts. for the Downtown Realty Co. The building will be six stories of reinforced concrete and is estimated to cost $80,000.

Montreal, Que.—Plans have been prepared by Doucet & Morissette, Archs., for the erection of a school at Montreal. The estimated cost is $200,000.

Shawville, Que.—Bids will be received until 4 p.m., Aug. 24,, by R. C. Desrochers, Secy., Dept. of Public Works, Ottawa, Ont., for the erection of a public building at Shawville.

Toronto, Ont.—Bids will be received until Aug. 28, by W. C. Wilkinson, Secy. Treas., Board of Education, for the erection of the High School of Commerce.

Walkerville, Ont.—G. H. Crane, Arch., Ford Bldg., is preparing plans for the erection of a theater for the Garden Theater Co. 69 Sandwich St., Walkerville. The estimated cost is $75,000.

Edmonton, Alta.—E. W. Morehouse, Arch., has completed plans for the erection of a four-story office building for Hugh McPhee. The estimated cost is $100,000.

Hon. Wilfred Gariepy, Edmonton, will erect a 7-story office building on Jasper Ave. The estimated cost is $200,000.

Flynt Building & Construction Co. of Palmer, Mass., has established a branch office at 536 A. Congress St., Portland, Maine, with Frank M. Churchill, Mem. M. S. C. E., in charge.

The Compressed Gas Manufacturers' Association, 25 Madison Avenue, New York, would like to receive from manufacturers of valves, cylinders, recording gages, filling and weighing stands and all material and appliances which enter into the manufacture, transportation and sale of compressed gases their catalogs and prices. These will be kept on file at the office of the Association.

An Arcade in New York—The Standard Oil Co., New York, has announced that plans have been accepted and adopted for an Arcade at 50 Broadway, formerly occupied by the Tower Building.

It is to be observed that this busy section of Broadway, Broad St., Trinity Place, and William St., below Cortlandt, is poorly supplied with retail shops—it has been difficult for the merchants to "break in." Recognizing these conditions the Standard Oil Co., developed plans for a building which would meet the requirements of the merchants and at the same time be one which would provide great service to the public. Several of the present buildings facing on Broadway with the rear on New St., have passages that are much used by pedestrian as the lower part of the city is poorly supplied with cross streets. H. Craig Severance and William Van Allen have been employed as the architects.

The structure will be three stories on Broadway and four stories on New St. It will be 20x70 ft., with iron and glass walls between marble pilasters. The lighting and ventilation will be from a central court.

CONTRACT PRICE

Barge Canal Work—Albany, N. Y.—Bids were received July 23 by Duncan W. Peck, Supt. Pub. Wks., Albany, for Contracts Nos. 119 and 120 for steel sheet piling, etc., at the movable dam at Rotterdam, N. Y., and reinforcing the superstructure of the movable dams at Rotterdam, Cranesville, Amsterdam, Tribes Hill, Yosts, Canajoharie and Fort Plain, N. Y. from (A) Frank M. Skene, Brockport, N. Y.; (B) Lupfer & Remick, Buffalo, N. Y.; (C) Walsh Construction Co., Davenport, Iowa; (D) John M. Rogers, Tonawanda, N. Y.; (E) Holler & Shepard, Rochester, N. Y.; (F) Penn Bridge Co., Beaver Falls, Penn.; (G) Whitehead & Kales Iron Works, Detroit, Mich.; (H) Fort Bridge Works, 45 Broadway, New York, N. Y. The item bids were as follows:

BARGE CANAL WORK, ALBANY, N. Y.

Contract 119.

	A	B	C	D	F
3,610 Cu.yd. excavation	$ .50	0.60	0.62	1.00	0.55
2,250 Cu.yd. second-class concrete	7.35	8.40	7.00	9.50	7.00
29,420 Sq.ft. steel sheet piling	1.00	1.00	.05	1.00	.89
510 Cu.yd. removing rip-rap	1.00	1.00	1.10	1.00	.90
1,600 Cu.ft. chipping concrete	.60	.30	.50	.75	.75
330 Lin.ft. drilling holes in existing concrete	1.00	1.50	1.25	1.50	1.50
150 Cu.yd. grout	9.00	10.00	9.80	10.00	10.00
Cofferdams, pumping, etc., "A", lump sum	3,000.00	4,200.00	3,600.00	3,500.00	3,500.00
Cofferdams, pumping, etc., "B", lump sum	4,500.00	6,000.00	4,600.00	5,00.000	4,000.00
Cofferdams, pumping, etc., "C", lump sum	3,800.00	4,800.00	3,600.00	4,000.00	3,000.00
Extended totals	$62,213	$68,471	$60,981	$70,610	$58,073

Contract 120.

	P	F	C	F
3,800,000 Lb. structural steel	$ .0435	$ .042	$ .0395	$ .043
840,000 Lb. reinforcing metal	.11	.083	.10	.10
99,000 Lb. new w. i. chain	.08	.07	.06	.09
25 M.F.B.M. sawed lumber	65.00	60.00	60.00	62.00
46 replacing truss bearings	500.00	500.00	350.00	450.00
23 Adjustment of new trusses	200.00	200.00	200.00	220.00
3,300 Lin.ft. w.i. pipe railing	1.25	1.00	1.00	1.20
138 Installing trolley brackets	3.00	2.00	3.00	3.00
Extended totals	$299,460	$268,926	$265,954	$287,994

Water Supply Extension, North Adams, Mass.—Bids were received July 27 by the Commissioner of Public Works for the water supply extension including the construction of an earth dam, reservoir and conduit from (A) Middlesex Contracting Co. (B) Farmingham Contracting Co. (C) Hanscom Construction Co. (D) W. T. Ryan Contracting Co. (E) T. Stuart & Sons Co. (F) Davis & Brock (G) Mason, Hilton & Co. (H) D. O'Connell Sons (I) H. P. Converse & Co. (J) Light, Heat & Power Corporation (K) P. J. Kennedy & Co. The item bids were as follows:

WATER SUPPLY EXTENSION, NORTH ADAMS, MASS.

Beaman Basin.

	A	B	C	D	E	F	G	H	I	J	K
5,000 Cu.yd. earth excavation	$0.80	$1.08	$0.65	$1.10	$1.25	$1.25	$0.75	$1.15	$1.14	$1.50	$1.50
70,000 Cu.yd. earth fill	.35	.30	.43	.59	.54	.53	.58	.61	.60	.66	.75
2,900 Cu.yd. concrete masonry in dam	4.75	6.00	6.25	6.00	7.00	6.50	8.00	7.50	6.54	8.85	9.00
900 Cu.yd. concrete masonry in conduit	11.00	8.00	8.75	10.00	9.50	15.00	9.00	13.00	11.80	21.45	11.00
4,000 Cu.yd. Slope paving	1.00	1.15	1.42	1.50	1.60	2.50	1.25	1.50	2.40	1.60	3.00
1,000 Cu.yd. paving spillway	2.05	6.00	4.00	4.00	6.50	5.50	4.00	4.60	5.84	5.35	4.00
2,500 Cu.yd. rip rap	1.50	1.75	3.00	1.75	2.00	2.00	2.00	1.75	1.80	1.50	3.00
65,000 Cu.yd. stripping	.33	.28	.35	.48	.47	.42	.55	.44	.49	.47	.50
250 Ft. 24-in. c. i. pipe	2.50	1.75	1.00	2.50	1.00	1.00	1.50	.60	2.95	.75	2.00
47,500 Lb. steel reinforcing	.06	.03½	.02½	.04	.04½	.04½	.04	.04	.03½	.04	.03
Gate house and appurtenances (lump sum)	850.00	2,250.00	3,000.00	2,300.00	1,900.00	3,300.00	1,700.00	4,000.00	960.00	2,400.00	2,500.00
Extended totals	$87,750	$88,406	103,7188	$123,600	$125,638	$129,188	$129,375	$131,525	$132,436	$149,208	$159,675